This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

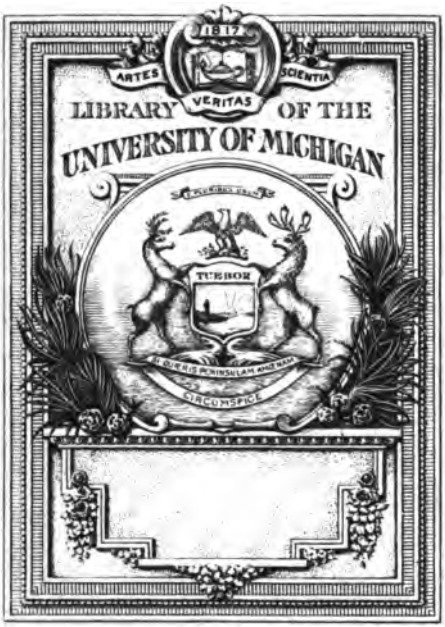
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`


ARTES
VERITAS
SCIENTIA
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
TUEBOR
CIRCUMSPICE

AC
7
.H18
1727

Halley, Edmund

Miscellanea Curiosa.

Containing a

COLLECTION

OF

Curious Travels, VOYAGES,

AND

Natural Histories

OF

COUNTRIES,

As they have been Delivered in to the

ROYAL SOCIETY.

VOL. III.

The SECOND EDITION,
Revised and Corrected by W. DERHAM, F.R.S.

LONDON:
Printed for JAMES and JOHN KNAPTON, at the *Crown* in St. *Paul*'s Church-Yard, and JOHN CLARKE at the *Bible* under the *Royal-Exchange*.
MDCCXXVII.

Lib. Com
Nuttall
5-20-42
45'108
v. 3 only
16994

THE

CONTENTS

A *Journal of a Voyage from* England *to* Constantinople, *made in the Year*, 1668 *by* T. Smith, *D. D. and F. R. S.* 1

Historical Observations relating to Constantinople. *By the Reverend and Learned* Tho. Smith, *D. D. Fellow of* Magd. Coll. Oxon. *and of the* Royal Society. 32

An account of the City of Prusa *in* Bythinia, *and a Continuation of the Historical Observations relating to* Constantinople, *by the Reverend and Learned* Thomas Smith, *D. D. Fellow of* Magd. Coll. Oxon. *and of the* Royal Society. 49

A Relation of a Voyage from *Aleppo* to *Palmyra* in *Syria*; sent by the Reverend Mr. *William Hallifax* to Dr. *Edward Bernard* (late) *Savilian* Professor of Astronomy in *Oxford*, and by him communicated to Dr. *Thomas Smith*, *Reg. Soc. S.* 84

An Extract of the Journals of two several Voyages of the English Merchants *of the Factory of* Aleppo, *to* Tadmor, *anciently called* Palmyra. 120

Some Account of the ancient State of the City of Palmyra, *with short Remarks upon the Inscriptions found there. By* E. Halley. 160

© 5-22-42 GS

A

A Voyage of the Emperor of China *into the Eastern* Tartary, *Anno* 1682. 179
The Distances of the Places thro' which we passed in the Eastern Tartary. 195
A Voyage of the Emperor of China, *into the* Western Tartary *in the Year* 1682. 196
An Explanation, necessary to justify the Geography *supposed in these Letters.* 210
Some Observations and Conjectures concerning the Chinese *Characters. Made by* E. H. *R. S. S.* 212
A Letter from F. A. *Esq; R. S. S. to the Publisher, with a Paper of Mr.* S. Flower's, *containing the exact Draughts of several unknown Characters, taken from the Ruins at* Persepolis. 233
A Letter from Monsieur N. Witsen *to Dr.* Martin Lister, *with two Draughts of the famous* Persepolis. 236
A Description of the Diamond-Mines, as it was presented by the Right Honourable the Earl Marshal of England, *to the* R. Society. 238
A Letter from the East Indies, *of Mr.* John Marshal *to Dr.* Coga, *giving an Account of the Religion, Rites, Notions, Customs, Manners of the heathen Priests commonly called* Bramines. *Communicated by the Reverend Mr.* Abraham de la Pryme. 256
Part of two Letters to the Publisher from Mr. James Cunningham, *F. R. S. and Physician to the* English *at* Chusan *in* China, *giving an Account of his Voyage thither, of the Island of* Chusan, *of the several sorts of Tea, of the Fishing, Agriculture of the* Chinese, &c. *with several Observations not hitherto taken notice of.* 269

A Let-

A Letter from Mr. John Clayton *Rector of* Crofton *at* Wakefield *in* Yorkshire, *to the Royal Society, May* 12, 1688. *giving an account of several Observables in* Virginia, *and in his Voyage thither, more particularly concerning the Air.* 281

Mr. Clayton's *second Letter, containing his farther Observations on* Virginia. 293

A Continuation of Mr. John Clayton's *Account of* Virginia. 301

Mr. John Clayton, *Rector of* Crofton *at* Wakefield, *his Letter to the* Royal Society, *giving a farther Account of the Soil, and other Observables of* Virginia. 312

A Continuation of Mr. Clayton's *Account of* Virginia. 337

Part of two Letters from Mr. J. Hillier, *dated at* Cape Corse, Jan. 4. 168⅞. *and* Apr. 25. 1688. *wrote to the Reverend Dr.* Bathurst, *President of* Trinity College Oxon; *giving an Account of the Customs of the Inhabitants, the Air,* &c. *of that Place, together with an Account of the Weather there from* Nov. 24. 1686. *to the same Day* 1687. 356.

An Account of the Moorish *Way of dressing their Meat (with other Remarks) in* West-Barbary, *from Cape* Spartel *to Cape* de Geer. *by Mr.* Jezreel Jones. 381

A Letter from Mr. John Monro *to the Publisher, concerning the Catacombs of* Rome *and* Naples. 394

An accurate Description of the Lake of Geneva, *not long since made by a Person that had visited it divers times in the pleasanteſt Season of the Year; and communicated to the Publisher by*

by one of his Parisian Correspondents: English'd. 404

Part of a Journal kept from Scotland *to New* Caledonia *in* Darien, *with a short Account of that Country. Communicated by Dr.* Wallace, *F. R. S.* 413

A Discourse tending to prove at what Time and Place Julius Cæsar *made his first Descent upon* Britain: *Read before the* Royal Society *by* E. Halley. 422

Miscel-

Miſcellanea Curioſa.

VOL. III.

A Journal of a Voyage from England *to* Conſtantinople, *made in the Year* 1668. *by* T. Smith, *D. D. and F. R. S.*

ON *Monday* Evening *Auguſt* 3, 1668. we took Barge at *Tower-Wharf*, and at *Greenwich* went on Board the *Bezant* Yacht for the *Downs*, where we arrived the next day in the Afternoon, and went on Board the *Leopard* Frigat, a Ship of 56 Guns mounted, Captain *O Bryen* Commander, appointed to carry Sir *Daniel Harvey*, his Majeſty's Ambaſſador to the Port of the *Ottoman* Emperor at *Conſtantinople*. Here, upon his firſt Arrival, the Ambaſſador was Complemented by Sir *Jeremy Smith*, then riding Admiral, Sir *Edward Spragg*, and ſeveral other Commanders of the Men of War,

and afterwards Saluted with Fifteen Pieces of Ordinance by the Admiral, to whom we returned as many; then by the Vice-Admiral and ſeveral other Ships. All which were anſwered together at the ſame time with 21 in the whole.

Here we were forced to Ride for ſeveral days, the Winds being contrary.

In the *Offing* between the *North Foreland* and *South Foreland* it runs Tide and half Tide, that is, it is either ebbing Water or Flood upon the Shore, in that part of the *Downs*, three hours, which is groſly ſpeaking the time of half a Tide, before it is ſo, off at Sea: (For the flux and reflux of the Sea is not made exactly twice in 24 hours, but, as it appears by accurate obſervation, it requires an overplus of almoſt 50 minutes.) The reaſon of this diverſity of Tides, I take to be from the meeting of the two Seas in that narrow Streight.

Oftentimes when the Wind has blown hard at N. E. or at W. or W. and by S. there has hapn'd an alteration of the Tides in the River of *Thames*, which ignorant People have miſtakenly lookt upon as a Prodigy.

It is a moſt certain Obſervation, that where it flows Tide and half Tide, tho' the Tide of Flood runs aloft, yet the Tide of Ebb runs under foot, that is, cloſe by the *ground*; and ſo at the Tide of Ebb, it will flow under foot, as that great and experienc'd Sea-Commander, Sir. *H. Manwaring*, words it.

Auguſt 9. We ſailed from the *Downs*, but were ſoon forced back by diſtreſs of weather, and came to an Anchor S. W. of the *South Foreland*. 10. The

10. The Wind blew at S. S. W. and the Sea run very high, ſo that we were in danger of loſing our Cable and Anchor; the Ground, where we rode, at 16 Fathom ½ water, being ſomewhat gruff.

15. The Wind coming about at W. N. W. we ſailed, and were Saluted with nine Guns from *Dover* Caſtle, and ſeven from one Fort, and five from another. We carried a Flag upon our Main-top, after we came out of the *Downs*. The Wind in the Afternoon at N. E. brought us by ſeven of the Clock to the *Neſs*, where we lay at Anchor during the Tide of Flood; during which time the Mariners caught good ſtore of *Whitings*, baiting their Hooks with raw Mutton.

16. We were in the morning athwart St. *Helen*'s Point in the *Iſle of Wight*; where we diſcovered Sir *Thomas Allen* with his Squadron under Sail, bound for the *Straits*.

17. In the morning we got to the Weſt of *Portland*, the Wind at N. by E. our Courſe lying thereupon S. S. W. but about noon, ſailing over part of the Race of *Portland*, where we met with a tumbling Sea, we Anchored at the N. W. part in the Bay, over againſt the Point that looks towards *Weymouth*. We were aſhore in the Iſland, which ſeems to be but one continued Rock; the Soil in ſeveral places not being above five or ſix Inches deep, as I found by digging a hole with my Knife; yet the Corn flouriſhing enough. The Caſtle conſiſts of a double Fortification; we could not obſerve above five Guns mounted. They told us, that in the Iſland there was but 1 Church, and 4 Villages,

We weighed at twelve of the Clock at night: But,

18. The Wind blowing fiercely at W. directly in our teeth, we made but little way, and could not weather the *Start* Point that night. The Moon upon its firſt emerging above the Horizon, ſeemed to have a colour like burnt Brick, the Sky very cloudy: but ſome Rain falling, as ſhe advanced higher and higher, ſhe appeared more and more fiery.

19. We weathered the *Start* Point by noon, but could not make much way beyond it.

20. We got into *Plymouth* Sound. The Cittadel, built upon a Rock, with large Counterſcarps and Baſtions, returned our Salute with nine Guns. Sir *Thomas Allen* with his Fleet ſtood to the Lizard, and came not to an Anchor.

21. Miſty Weather. About eleven a Clock Forenoon, and about ſix in the Evening, we obſerved the Vapours in great quantity aſcend out of the Sea, ſoon covering the tops of the Mountains. Here we ſtaid three days, taking in ſome Proviſions, ready prepared for us.

On *Sunday* the 23*d* of *Auguſt* we weighed out of *Plymouth* Sound, and made the *Lizard*, a Promontory in *Cornwall*, before night: The *Manacles*, ſeveral Rocks ſo called, we diſcerned very diſtinctly, it being then low Ebb; as alſo the Lands end. The Wind blew freſh; and we obſerved the Waves in the Night-time, as if they had been liquid Fire, but paliſh.

The

The *Lizard* bearing N. of us, we changed our Courſe, and taking leave of *England*, we failed into the Ocean. God of his Mercy ſend us a happy Voyage.

24. We run this day thirty nine Leagues by a Compute from our Log-line.

25. We were full open with the *Bay of Biſcay*. Several *Gulls* were hovering over the Surface of the Water to catch Fiſh, which ſwam by in vaſt ſholes, at about 50 Leagues diſtance from any Land.

At other times I have ſeen ſeveral Birds floating upon the Water, which being driven by ſome Tempeſt from the Coaſts of *Spain* and *Portugal*, have been tired in their flight, and ſo drowned. This happens frequently in the great Ocean, where they meet with no Land to fly to in ſeveral hundreds of Leagues; and ſometimes even in the *Mediterranean*, in the Mid-Seas between the *Chriſtian* and *Barbary* Shores. In blowing Weather, among other Birds flying croſs, we ſaw a Hawk making to our Ship, then under good and ſwift Sail, which perched upon the round-top of the Main-maſt; which one of the Seamen eſpying, he preſently run up the Shrouds, and brought down the Hawk, which made no attempt to fly away, being quite ſpent. But not long after, the Hawk, recovering his Spirits by reſt and meat which was given him, took wing and got away from the Fellow, notwithſtanding all the care he took to ſecure his new Adventure, which he hoped to have made Money of at the next Port that we ſhould come to.

26. A ſtrong Levant ſtill blowing, and the Sea very rough and boiſterous, the Gale continuing almoſt right a ſtern, we run theſe 24 hours above 70 Leagues.

27. We found our ſelves by our obſervations, that we were in the Latitude of 42 degrees 17 minutes, and began to be very ſenſible of our nearer approach to the South, the Weather being exceſſive hot. In the Afternoon we heard the report of ſeveral Guns fired at about ſeven or eight Leagues diſtance, as we gueſſed. At eight of the Clock at night another Gun was fired ſomewhat near us, which we thought might be from an *Algerine* Man of War, who gave a ſignal to his Conſorts, and who anſwered by ſeveral flaſhes of Powder. Whereupon our Trumpeters ſounded a Point of War, but no return was made. However, the Captain quartered his Men, and the Decks were cleared, and all things made ready in order to a Fight the next Morning; as ſoon as day appeared, we ſaw the Sea clear, no Ships being in view any way: ſo that we concluded that they were Merchant-Ships, with their Convoy, ſtanding to the Northward.

28. Dreadful Lightnings in the Clouds towards the Evening; after which great Dews fell: the Weather extream hot.

29. We ſaw a Pilot-fiſh ſwim by the ſides of the Ship, and ſeveral Bonito's and Albicores playing, as it were with their Heads above Water. The Wind took us ſhort in the night, and ſoon after there was a ſtark Calm; and we had great reaſon to bleſs God for it: For had we continued our Courſe

that night, we had either run a-ground, or had been caſt upon the Rocks near to *Peniche* in *Portugal.* The fault was miſ-reckoning, and haling in too ſoon to make the *Southern Cape:* though the Seamen, to ſalve their Credit, and to excuſe their Error, which had like to have proved ſo fatal to us, pretended that we were ſet in by a ſtrong Current. God make us thankful for this great Deliverance.

30. This Morning we were ſurprized to ſee our ſelves within four or five Leagues of the Shore, when we had thought that we had been above twenty. In the Afternoon, the Wind coming on freſh, we weathered the weſtermoſt Iſle of the *Barlings.* On the greateſt of which, being as we gueſſed, above half a Mile in length, the *Portugueſe* have built a Fort to hinder the *Barbary* Pirates from careening their Ships there, or taking in freſh Water. The Land of it very high, and bore off us S. E. by E. By it lie ſeveral Rocks. The other Iſlands are diſtant about a League. I told five of them: the greateſt of which laſt lie ſomewhere inward to the Shore.

For two Nights together about this time (28 and 29) the Sky being very hazy, the Sun ſet in a colour as deep as Blood, which was very aſtoniſhing. We were then in the Latitude of 40.

31. Betimes in the Morning we ſailed by the Rock of *Lisbon*, at ſome diſtance, which was ſcarce diſcernible by reaſon of the cloudineſs of the Weather. Two *Turks* Men of War are now plying to the Windward of us; but

but dare not come up to ſpeak with us, perceiving that we are only laden with Powder and Bullet.

September 1. In the Morning we made Cape *St. Vincent*. I went on Shore with the Lieutenant and ſeveral others in our Pinnace, which we drove into one of the Coves; and were forced to climb up a Rock, the aſcent of which was very dangerous and troubleſome; and made more ſo by the Rays of the Sun, which were reflected with that vehemence, that the Heat was almoſt intolerable. Having gained the top, we were met by an Officer and ſome Soldiers, who had us into the Caſtle, the middlemoſt of the three, which are built along that Promontory for the Security of the Coaſts, and entertained us with Wine, Grapes, and Marmalade. They told us, that a Squadron of Engliſh Men of War ſailed by the day before. We here met with two Veſſels belonging to *Dartmouth*, laden with Fiſh from *Newfoundland*, bound for *Alicant*. All along the Coaſts, at the diſtance of about two or three Leagues, are ſeveral Watch-towers built to give notice of Pirates.

Becalmed for the moſt part theſe two or three days.

5. In the Morning we weathered the Point of *Cadiz*, and came to an Anchor in the *Bay of Bulls*, about half a League from the great *Porgoe*; and in the Afternoon went on ſhore. We were entertained by the *Engliſh* Conſul, and carried by him to view the Fortifications, which are eſteemed to be as regular as any in *Chriſtendom*; built in the ſame place where

where the Town had been attacked formerly by the *Engliſh*, under the Conduct of the Earl of *Eſſex* in the Reign of Q. *Elizabeth*. Plays are uſually here, as in other parts of *Spain*, acted on a *Sunday*. During the time of our ſtay, was repreſented the Hiſtory of the Patience of *Job*, the Devil brought upon the Stage, tempting *Job*'s Wife in a drolling way, which cauſed great Laughter and Merriment among the Spectators. At *Malaga*, as the Merchants told us, the *Sunday* before we arrived there, was acted the *Schiſm of England* in the time of King *Henry* the Eighth, whom the *Spaniards* will not yet forgive, for Divorcing himſelf from Q. *Catherine*, their Country-Woman.

9. We ſailed from *Cadiz*.

10. This Afternoon we were forced to Anchor, not far from *Cape Spartel* or *Sprat*, as the Seamen call it, not being able to weather the Point.

11. This day we came to an Anchor in *Tangier-Bay*, with Sir *Thomas Allen*'s Squadron.

Tangier lies within the Entrance into the *Strait* of the *Mediterranean*, in the Latitude of about 35°, 36′. It is ſituated in the bottom of a Bay, and is built on the ſide of the Hill, overlooking the Sea, encompaſſed with high Walls to the Land-ward, and commanded by a ſtrong Caſtle. The Heats would be very troubleſome but for the Sea-breezes which cool and fan the Air. In the Caſtle I met with a *Roman* Monument, erected to the Honour of *P. Belius*, a great Officer and Soldier in *Trajan*'s time; who, among his other

Streight, and *Ceuta* on the *Barbary* coaſt: at which places *Hercules* is ſuppoſed to have ſet up his *Pillars*. What becomes of this great quantity of water poured in this way, and of that, which runs from the *Euxine* into the *Boſporus* and *Propontis*, and is carried at laſt through the *Helleſpont* into the *Ægæan* or *Archipelago*, is a curious *ſpeculation*, and has exerciſed the wit and underſtanding of *Philoſophers* and *Navigators*. For there is no ſenſible riſing of the *water* all along the *Barbary Coaſt* even down to *Alexandria*, the land beyond *Tripoli*, and that of *Ægypt*, lying very low, and eaſily overflowable. They obſerve indeed, that the water riſes 3 feet, or 3 feet and an half, in the *gulph* of *Venice*, and as much, or very near as much, all along the *Riviera* of *Genoa*, as far as the river *Arno*: but this rather adds to the wonder.

I here omit to ſpeak at large of the ſeveral *Hypotheſes* which have been invened to ſolve this difficulty: ſuch as *ſubterraneous vents*, cavities and indraughts, *exhalations* by the *Sun-beams*, the running out of the water on the *African ſide*, as if there were a kind of circular motion of the water, and that it only flowed in upon the *Chriſtian*-ſhore: which latter I look upon as a meer fancy, and contrary to all obſervation.

My conjecture is, that there is an *undercurrent*, whereby as great a quantity of water is carried out, as comes flowing in. To confirm which, beſides what I have ſaid above about the difference of tides in the *offing*, and at the *Shore* in the *Downs*, which neceſſarily ſuppoſes an *under Current*, I ſhall preſent you

with an inſtance of the like nature in the *Baltick Sound*, as I received it from an able Seaman, who was at the making of the tryal.

He told me, that being there in one of the *King's* Frigats, they went with their *Pinnace* into the *middle ſtream*, and were carried violently by the *Current*: that ſoon after they ſank a *bucket* with a large *Cannon* bullet to a certain *depth* of water, which gave check to the boat's motion, and ſinking it ſtill lower and lower, the *boat* was driven a-head to wind-ward againſt the upper *Current*: the *current* aloft, as he added, not being above 4 or 5 *fathom* deep, and that the lower the bucket was let fall, they found the *under-Current* the ſtronger. I deſigned to have made the *Experiment* in the *Streights-Channel*; but both times I paſt, the Eaſterly wind blew ſo hard, that there was no putting out the boat with any ſafety; nor indeed at thoſe times had we any leiſure for ſuch a *Curioſity*; which thoſe, who liv'd at *Tangier*, might have tryed without any difficulty or danger.

This conjecture, how likely or unlikely ſoever, will ſtand or fall according to the certainty of the *Obſervations*, which ſhall be made there, which I will endeavour to procure in order to the further eſtabliſhment, or utter overthrow of it.

13. We weighed out of *Tangier* and turned into the *Strait*, though againſt the Wind. The diſtance between *Gibraltar* Cape, which gives name to the *Straits*, and is joyned to the Continent of *Spain* and *Ceuta* a well-built and ſtrongly fortified Town, lying under the Hill *Alybe*, called ſo by the *Greeks*, which the

the Seamen commonly call, as do ſome *Spaniſh* Writers, *Apes-hill*, from the great number of Apes which uſed formerly to haunt there, (at which places *Hercules* is feigned to have ſet up his Pillars) may be about ſix Leagues; tho' both Lands lying very high (for we ſaw the Clouds much below them) it does not appear in the middle of the Current, out of a tall Ship, ſcarce half ſo broad.

14. Little Wind ſtirring.

15. A great Miſt all the Sea over, ſo that we could ſcarce ſee three lengths of the Ship, which began to vaniſh in the Afternoon; and then we deſcryed the *Cape of Malaga* at about four Leagues diſtance; and came to an Anchor that Night. The City lies under a high Hill, and is the Seat of a Biſhop, who is at this time a Natural Son of King *Philip* the Fourth, of the Order of St. *Dominic*. Here the Merchants told us, that it had not rained for ſeven Months together, except a day or two for an Hour: and that the *Algerines*, who were then breaking with us, had not been able to have ſet a Fleet to Sea about two years before, if they had not been furniſhed with Maſts from *England*; and that they were now in Expectation of another Ship laden with the ſame, notwithſtanding the Rupture, which was as good as began. I only make a Query, Whether *Jews* or *Engliſh* Men were the Freighters?

16. The next Morning the Governour immediately returned our Salute Gun for Gun: ſoon after we weighed from *Malaga* Road, the Weather very hot. Some Rain fell at Night, though very moderately. In the Even-

Evening, after we had ſailed about eighteen Leagues, we were becalm'd. The Sea being quiet, we ſaw a great number of *Tortoiſes* ſwimming above Water, ſeveral *Bottle-noſes*, fiſh of about three yards long, and very thick, and Hawks flying over to the *Barbary* Coaſt. The Hills of *Granada* were ſeen plainly by us, though at a great diſtance.

The Wind coming Eaſterly, we kept at Sea, beating and plying to and again for theſe four days, ſcarce gaining ſixteen Leagues of our way, and were forc'd to come to an Anchor in the *Bay of Adera*, where there is a ſtrong Cittadel, about thirty four or thirty five Leagues from *Malaga*.

21. We paſſed by *Cape de Gata:* but the Levant wind ſtill blowing, having continued almoſt in that Point for above two Months, as we computed from what they had told us at *Tangier*, we could make but little progreſs in our Voyage.

25. Between three and four of the Clock in the Morning the Tornadoes began to blow, and the Wind violent for the time, with ſuch continued Flaſhes of Lightning for ſeveral hours, as that the whole Sky ſeemed to be on fire, intermixed with terrible Claps of Thunder, after which followed great ſhowers of Rain.

26. The Wind ſtill contrary, we deſcryed *Cape St. Martin* at about fifteen Leagues diſtance. Tacking about and ſtanding off to Seaward, next Morning 27. we found that we had loſt about three Leagues of our way.

28. We were athwart *Orlando's Gap* within two Leagues of the Shore, *Cape St. Martin* bear-

bearing off us *N.* by *W.* The Wind now ſtill; but a ſwelling Sea coming from the Weſtward, which is uſual before a Wind, which drives the Water before it.

On *Michaelmas-day* we were up with the Iſland *Ivica*, or *Iviſe*, as the Mariners call it, and the Wind blowing fair, we ſtood our Courſe; and the next day at Noon we made the *Iſland Majorca*, ſituate over againſt the Kingdom of *Valentia*, and came to an Anchor in the *Bay* of the City, being forced in hither for want of freſh Water, in the Afternoon the Boat was ſent on ſhore but the Vice-Roy would not give us Prattick, not bringing a Patent from *Malaga*.

Octob. 1. The Secretary was ſent with the King's Paſs to the Vice-Roy to demand Prattick, who preſently ſummoned the Officers of the *Sanita*. After long Debates and Delays they conſented, and came to the *Mole* to receive him. He went directly to the Governour to acquaint him, that we were ready to Salute the City with what number of Guns he pleaſed, if he would engage upon his Honour to give us as many. He replied, that he would give us three for five; and wondered, that we being but a ſingle Ship, ſhould make ſuch a Demand. The Secretary told him, That we were to be treated as an Admiral, having a Flag on our Maintop; and that the Governour of *Malaga* had done it. To this he ſaid, That *Majorca* was a Kingdom, that he was the King's Repreſentative, and that by Reaſon of the Miſcarriage of his Predeceſſor, when Monſieur *de Beaufort*, the *French* Admiral was there,

there, he had received ſtrict Orders from *Madrid* not to do the like. The Secretary replyed, That we had an Ambaſſador on board, and had as ſtrict Orders, and ſhould anſwer as ſeverely for the Breach of them. His laſt Anſwer was, That we might, with our Sails looſe, keep before the Town, till we had furniſhed our ſelves with what we wanted. Upon receiving this Meſſage, the Ambaſſador diſpatched away one *Joſeph Gabriel Cortez*, a *Spaniard*, but employed by the *Engliſh* Merchants trading to that Iſland, then on board our Ship, to acquaint him, That when we were ready to go away, we would looſe our Sails, and not before. We landed within the *Mole*; the Walk upon it about four or five Yards broad; at the Extremity of which is a very large and ſtately Gate, which leads into the City. We went into the great Church, ſomewhat wider than *Weſtminſter-Abbey*, but darkiſh within: The Portal very magnificent, adorned with ſeveral Marble Statues in Niches one over another. The High Altar very plain and unadorned: but others extraordinary rich and glorious. Not far from the City are ſeveral Mills to grind their Olives, Oyl being the great Commodity of the Iſland.

2. The next Morning we weighed, without taking any Kind of notice of the Town, ſailing all along in ſight of the Iſland, which preſented us with a pleaſing and delightful Proſpect; the Valleys, lying under the Hills, fruitful of Wine and Corn. The whole Iſland is judged to be about ſixty Leagues in Compaſs, and in length about fifteen; which we

ſailed from the Weſtermoſt Point, where lies the Iſle *Dragovera*, at a very little diſtance to the Eaſtermoſt, where there is built a ſmall Fort. To the S. S. E. lie ſeveral little Iſlands, called the *Cabreas*; between which and *Majorca* we ſteered.

3. We were athwart *Port Maon* in *Minorca*; a fine level Country, having but one Hill in it N. W. by W. as it bore off us. In the Evening the Wind very ſcant.

4. This day, as yeſterday, exceſſive hot.

5. In the Afternoon we deſcryed the Main Land of *Provence*.

6. We were over againſt the Iſlands *Hieres* and the Highland of *Thoulon*.

7, 8. Theſe two Days becalmed; and the Sea extraordinary ſmooth.

9. We were over againſt the Weſtermoſt part of the *Alpes*, which we diſtinctly ſaw at about twenty Leagues diſtance, and appeared far higher than the Hills of *Granada*.

10. We ſailed by *Final* and *Ventimiglia*.

12. We came in the Morning to an Anchor over againſt the *Mole*, and not far from the Lantern in *Genoa*. Having obtained Pratick of the *Maeſtri della Sanita*, after a little demur about the Salute, the Senate being aſſembled, and ſome of them proteſting upon their Honours, and ready to produce their Regiſters, that they never ſaluted the Ship wherein was an Ambaſſador of *France* or *Spain*, as not taking any notice of the Perſon who did bear that Character, 'till they had firſt intimation, that the Ship was arrived in their Port by its ſaluting the Town. It was agreed that the Ship ſhould Salute the

Town

Town with eleven Guns, which they were to anſwer, as they did, with an equal number: and after a little pauſe, they ſaluted the Ambaſſador with nineteen more, which was anſwered with as many. After this, the Duke and Senate ſent the Maſter of the Ceremonies to wait upon the Ambaſſador: who going away, returned ſoon after with a Preſent of Calves, Fowl, Wine, Sweetmeats, *&c.* and acquainted his Lordſhip, that they had deputed ſix of their Gentlemen to Compliment him, and wait upon him; which Civility he thought fit to refuſe, deſiring to be *Incognito*. But however, going aſhore, he was welcomed by the *Illuſtriſſimi Signiori*, the *Durazzo's*, two Brothers, the elder of which had been Ambaſſador for the Republick, in the Court of *England*, and the other at *Conſtantinople*, and by them carried to ſee the *Villas* out of Town. The figure of *Genoa* is Semicircular, beginning from the Lantern Weſtward, lying under an high Hill, upon the riſing of which the ſeveral Houſes, built of Marble, afford a very fine Proſpect, and add much to the Beauty and Glory of the place. *Strada Nuova* perchance is the moſt ſtately Street in the whole World. The new Church of the *Annunciata*, built by the *Lomellini*, where a thouſand may go up the ſtairs abreaſt at the ſame time, for curious Painting, rich Altars, and exactneſs of Architecture, incomparable. The *Dome* alſo and the Church of the *Theatins* very ſtately and curious. Other matters I purpoſely omit.

14. In the Evening we ſet Sail from G*noa*.

Becalmed for the moſt part theſe thr Days, though helped ſomewhat forward b the Breczes that blew off the ſhore after S ſet.

18. In the Afternoon we made the Iſla *Gorgonia*, about nine Leagues from *Livorn* a little round Iſland, with a Caſtle on t top.

19. In the Morning we came to an Anch in *Livorne* Road, about a Mile from t Town: the Road large and ſecure, eſpeci ly to the Northward. The Ambaſſador ke on Board, the Governour refuſing to Sal the Ship firſt, though he had formerly ſalu the *French*; pretending that every Con might carry a Flag; and alledging that Maſter, the Grand Duke, was as great abſolute, as the Republick of *Genoa*: that they had rather throw themſelves u the King of *England*, than do a thing wh might prove of ſuch an ill Conſeque Sir *John Finch*, his Majeſty's Reſident, t ther with Sir *Thomas Baines*, came from *rence* to Complement the Ambaſſador, immediately diſpatched away a Courie the Grand Duke about the Salute; wh ferred the whole Affair to the Governour: he making a Proteſt that he was ready to all the reſpect which was done to the Amb dor's Character and Quality, upon the mentioned Pretenſions, ſix days after arrival, abſolutely refuſed to Salute the firſt.

Livorne is the great Magazine of Trade for the *Levant*, being a free Port: Merchants of all Countries reſiding here, *Armenians* eſpecially, and *Jews*; which latter enjoy great Privileges, without wearing any diſtinct Mark in their Hats or Habits, whereby they may be known. They are allow'd the publick Exerciſe of their Religion: their Synagogue large and handſome. The Port inward has a *Mole* for the Duke's Galleys and other ſmall Veſſels to ride in: the Entrance of which is chained up every Night. Hard by is the Statue of Duke *Ferdinand* in Marble, raiſed upon an high Pedeſtal; under which are four Slaves in Braſs, in different Poſtures, very large, and above the ordinary proportion, but done with exquiſite and admirable Art. Two Caſtles to the Seaward well fortified: the Town Walls very high, and the four Gates ſtrongly guarded: below which is a Ditch of about fifteen or twenty yards over, and very deep. No Stranger is allowed to view the Works, nor Soldier permitted to come out of the Caſtles. About four thouſand Slaves are there, as the Merchants told us, who are lockt up in the *Bagno* every Night. The *Piazza*, where the Merchants meet, is adorned with Marble Pillars, which ſuſtain the Portico's: at the Eaſt end of which is the great Church whoſe Roof appears very glorious, having ſeveral Circles richly gilded and painted with curious Figures.

The broad Street is paved between two and three yards on each ſide with Free-ſtone.

27. In the Afternoon we weighed out of *Livorne* Road, and ſailed by the Iſlands *Gorgonia* and *Capraria*, ſeeing *Corſica* at a diſtance.

28. We lay beating at Sea all this Day, the Wind being contrary.

29. This Day we were forced back, the contrary Winds ſtill continuing.

30. We weighed a ſecond time, and ſailed by three ſmall Iſlands, *Capraria*, *Planaſia*, and *Monte Chriſti*. We ſaw alſo *Gigio* and *Sanuti*, two other ſmall Iſlands near the Main: but we made but little way, by reaſon of ill Weather for 4 or 5 Days.

Novemb. 5. At Evening we ſaw the Eruptions of Fire from *Stromboli*, which lies to the N. W. of *Sicily*. Sometimes it flamed very bright Light as a *Beacon*, at other times there appeared only a glorious kind of Light, like that of an ordinary Star when the Air is thick and hazy. They ſay that it flames moſt in rainy Weather.

6. In the Morning we were up within a League of it, and plainly perceived it to ſmoke. It is of a round figure, and, as we gathered, may be about three or four Miles in compaſs. It bore W. by S. of us. Not far from it lye ſcattered ſeveral other Iſlands, called by the Ancients *Æoliæ* and *Vulcaniæ*: among which are *Lipara*, a long flattiſh Iſland, and *Vulcanello*, which ſmokes moſt. This Afternoon we came to an Anchor in eight Fathom Water in the *Phare* of *Meſſina*, in the mid Stream between *Scylla* and *Charybdis*: a violent and ſtrong Current ſetting againſt us, and the Wind not high enough, ſo as to be

be able to ſtem it. The breadth of the *Strait* from *Meſſina* to *Rhegium* may be about a League. The Land is very high on the *Calabrian* ſide, where are very ſteep Rocks, and great depth of Water, above 150 Fathom, as they told us: but on the *Sicilian* ſide, near *Charybdis* Shole-water, and uſually an Eddy. On the Sandy Banks ſtands the Phare or Watch-tower. Several Currents meeting in this narrow Paſſage, cauſe a great ripling of the Water: and great quantity of Water coming in, as the Winds drive, in great quantity meeting with the Shole, is broken into Waves. The Eddies here are cauſed by the meeting of the different Currents by which the Waters are ſometimes carried N. and ſometimes S. the great danger is, leſt they drive the Ship on either ſide. We have had Lightning for ſeven or eight Nights together.

7. We ſail'd by *Ætna*, now called *Mongibel*, where the Sea widens ten or eleven Leagues over. Now we ſee plainly the Smoke briskly iſſuing out of the *Crater*, the *Limbus* of which was all black. The uppermoſt part of the Mountain was covered with Snow, except ſome ſtreaks of Aſhes, as we judge, which lie as it were in a Gutter, ſpread here and there.

8. We eſpied a *Saettia* at about 3 Leagues diſtance, and making up to her, found her forſaken. The Captain ſent ſeveral Seamen on board, and carryed the Veſſel to *Smyrna*.

Scanty Wind for ſeveral Days: and the Lightning ſtill continued.

13. We were up with *Cape Modona*, the Southermoſt Cape of the *Morea*, and ſailed by *Coron*. The Land very high, the Hills of *Arcadia* lying Eaſtward from us. The Weather exceſſive hot at this time, as it is in *England* at *Midſummer*. We eſpied from our Maintop-maſt five Sail of great Ships, which we ſuppoſed to be *Tripolines*, who did not think fit to come up and ſpeak with us. But afterward we heard for certain that they were part of the *Venetian* Fleet.

14. We lay for the moſt part becalmed over againſt *Cape Matapan*: but in the Evening the Wind blowing freſh, we ſailed between the Iſland of *Cerigo* and the Main Land of *Greece*; it being about three Leagues over to *Cape Angelo*.

15. We entred the Arches, and ſteered through the North Channel, leaving *Melo* and *Antimelo* on the Starboard-quarter, at ſome Leagues diſtance.

16. Betimes in the Morning we were athwart *Negropont*, and ſailed between it and *Andros*. The *Bocca* lies S. W. and N. E.

17. We ſailed by *Chios* or *Scio*, which is very mountainous toward the middle. It is about four Leagues diſtant from *Cape Caraboroun*, or the *Cape of the black Noſe*, as the *Turkiſh* word ſignifies, which the Seamen, in their uſual way of corrupting Names, call *Cape Jobbernoule*, the *Corinæum* of the Ancients, a Promontory of the famous Mountain *Mimas*, which runs along the Southern ſide of the *Bay of Smyrna*.

This Day the *Smyrna* Fleet from *England* comes up to us very luckily, to our great Satisfaction and Joy.

18. We are now got into the *Bay of Smyrna*, and come to an Anchor without the Caſtle, not far from St. *Jacomo's Point*, as the Seamen call it, or rather *Sangiac Point*. In the Afternoon the Conſul, with ſeveral Gentlemen of the Factory, came to wait upon my Lord Amdaſſador, and deſired his Lordſhip to defer his Entrance into *Smyrna* till the Twentieth, that he might be received with greater Honour. That Evening we heard a great howling of *Jackalls* upon the Hills.

20. The Conſul with the Nation, accompanied with his *Druggermen* and *Janizaries* in their *Habits*, together with ſeveral *French*, *Dutch* and *Geneoſe* Merchants, reſiding in that famous Emporium, came to the Village near the Caſtle, who there expected us with Horſes. Upon our going aſhore, the *Leopard* fired fifty one Guns. We made about 140 Horſe; and immediately upon our ſetting forth, we rode for about three Miles together under the Hill to the S. W. of *Smyrna*; the places adjoyning ſet thick with Olive, Fig, and Almond-trees. Afterwards we clambered over ſome rocky Aſcents; but the Horſes of the Country being ſure-footed, we were in no danger of falling. Some little way we were forced to ride on the Sea-ſhore, and ſoon after came to the Jews burying place, whoſe Monuments lie flat upon the ground. As ſoon as we entred into the City, we found the Streets full of *Greeks*, *Armenians*, *Turks*, aud

and *Jews*, whom Curioſity had drawn together to ſee and obſerve our Cavalcade; the *Engliſh* Ships, which were in the *Bay*, firing their Guns, as we paſt near the Shore. And ſo after three hours riding the Ambaſſador was brought to the Conſul's Houſe, where Lodgings were provided for him. During our ſtay we met with not only kind, but very noble Entertainment from the worthy Gentlemen of the Factory.

Decemb. 8. We took our leave of *Smyrna*, being accompanied by the Conſul and Merchants on board the *London-Merchant*, Capt. *John Hill* Commander, the *Leopard* being ordered to go no further than *Smyrna*, it being feared in *England*, that if ſhe had ſailed up to *Conſtantinople*, the *Turks* might have preſs'd her for their Service in *Candia*, which they were then beſieging.

9. This Morning we weighed betimes, and ſailed between *Scio* and *Mytilene*. But on the

10. We were forced back near the long Iſland within the Bay, being unwilling to go to *Scio*, the *Tripolines* and *Turkiſh* Galleys lying there. Here we lay ten Days, expecting a fair Wind.

20. The Wind coming about and favouring us, we ſailed a ſecond time between *Scio* and *Mitylene*.

21. We paſt by *Lemnos*, and were up with the Iſland *Tenedos*; a fine Champaign Country, only with one Hill toward the Middle of it. The Caſtle to the N. E. part of the Iſle: over againſt which lye three ſmall Iſlands in a ſtrait Line. Here we came to an

Anchor. We ſaw the Ruins of *Troas* at a diſtance, but did not think it ſafe to go aſhore.

22. The Wind coming about at S. we entred the *Helleſpont*, which may be about two Leagues and a half over. The Caſtles built upon the oppoſite points of Land, about 11 or 12 Years before, after the great Defeat given the *Turkiſh Armata* at the *Dardanels* by the *Venetians*; *Cape Janizary* on the *Aſian* ſide; which, with the *Philæum*, makes a tolerable good Bay for ordinary Veſſels. The narroweſt Strait of the *Helleſpont* is at the two other Caſtles, diſtant about ſix Leagues, where it may be about $\frac{1}{4}$ of a Mile wide. Theſe the *Chriſtians* call the *Dardanelli*; at which are ſituate the Towns, *Seſtus* and *Abydus*, famous in *Greek* Poeſie. Theſe Caſtles we ſaluted with our Guns and Trumpets, as we did the firſt: But each, whether out of Pride, or out of Covetouſneſs, to ſave the *Grand Signior*'s Powder, return'd us no more than two Guns. The Wind blowing very fair we ſailed into the *Propontis*.

23. We paſſed by St. *Stephano's Point*, where we had a full view of the S. E. Angle of *Conſtantinople*, which being ſituated upon ſeveral Hills to a mighty advantage, what with the Cypreſs-Trees intermixed, and what with the gilded Spires of the *Moſchs*, yielded us a very diverting glorious Proſpect. Paſſing by the *Seraglio Point*, which we ſaluted by a diſcharge of ſeveral Guns, in the mid Stream between it and the *Tophana*, we came to an Anchor,

26. On St. *Stephen*'s Day the Ambaſſador landed at *Galata*, (having before been viſited by the Earl of *Winchelſea*, and the Merchants reſiding there) and was received there by the *Chiaus Baſha* and the *Vaivod* of *Galata*, the *Janizaries* and *Chiauſes* attending, and was waited upon by them to his Palace: and ſoon after the *Kaimacam*, or Governor of *Conſtantinople*, ſent an Officer to Complement him upon his Arrival; the *Grand Signior* being then at *Lariſſa* in *Theſſaly*.

January 2. The Ambaſſadors, Old and New, went over to *Conſtantinople*, that Morning being aſſigned by the *Kaimacam* to give them Audience; the *Chiaus Baſha* and other Officers attending at the Water-ſide to receive them; Horſes being brought thither for them and their Followers to mount. This *Kaimacam Juſuph*, a little old Man, had formerly been a Page of the Chamber, and chief Falconer, and afterwards *Baſha* of *Siliſtria*. He entertained the Ambaſſadors and their Company with Perfumes, Coffee, and Sherbet, and diſtributed about fifteen *Koftans Orreſts* among them: after about an Hour's ſtay they took their leave.

Being upon the Coaſts of *Greece* about *Auguſt* or *September* 69. in the Latitude of 35°. 53. we found by our *Azimouth* Compaſs, that we had Weſterly variation there 5°. 22.

The variety of Colours of the Sea-Water at ſeveral times chiefly depends upon the Wind and Weather, and the reflexion of the Light upon it. It's uſual and moſt natu-

natural Colour is a deep Green: but in Cloudy and Rainy Weather, the Surface of the Water appears blackiſh. On the *Goodwins* upon the Tide of Flood, the Water was white, the Waves by reaſon of the Shallows, meeting with oppoſition, and breaking into Foam, till the Flood is well advanced. Sometimes the Water is of a perfect Azure colour, as we obſerved for ſeveral Weeks in the *Mediterranean*. The Sun ſhining bright upon the Water, ſometimes the upper part of the Waves appears Purpliſh, ſometimes Reddiſh; though in Shallows perchance it may receive this latter Tincture alſo from the Sands which lie under it. When the Wind has freſhned, and the Ship has been under full Sail, I have obſerved the Waves to the head, and at the ſides of the Ship, to appear with a pale kind of brightneſs: and at *Malaga*, and at my return, going on board our Ship, which lay about half a League from the ſhore, at Night, the Wind then at Eaſt, the Boat's Crew letting their Oar fall roughly into the Water, diverted us as it were with the ſight of a continued Flame, raiſed by their rowing; which I aſcribe rather to the Saline Particles of the Sea-Water, which were then put into a violent Agitation, than to the Spawn of Fiſh, as ſome of our Company imagined.

Sailing toward the Weſt of *Portland*, we ſaw ſeveral *Porpiſces* playing with their Heads above Water; which I mention only, becauſe the Seamen look upon them as fore-runners of a Storm; the Wind ſoon after

Hiſtorical Obſervations relating to Conſtantinople. *By the Reverend and Learned* Tho. Smith, *D. D. Fellow of* Magd. Coll. Oxon. *and of the* Royal Society.

CONſtantinople, formerly *Byzantium*, was [a] by *Conſtantine* the Great, called ſo after his own Name, who being mightily pleaſed with the beautiful and advantagious ſituation of the Place between two Seas, and defended by narrow Streights on both ſides, removed the Seat of the Empire hither, and laid the foundation of its future Splendor and Greatneſs. It was alſo by a [b] ſpecial Edict or Law of the ſame Emperor, which he cauſed to be engraven on a Marble Pillar, placed near his own Statue on Horſeback, in one of the Piazza's of his new built City called *Strategium*, where the Soldiers

[a] Κατὰ τῶν ἐπώνυμον ἡμῶν πόλιν. *So the Emperor* Conſtantine *in a Letter to* Euſebius, de vita Conſtantini *lib.* 4. *cap.* 36. & apud Theodoretum Hiſtor. Eccleſ. *lib.* 1. *cap.* 16. *v.* etiam Socrat. Scholaſt. Hiſt. Eccleſ. *lib.* 1. *cap.* 16.

[b] V. Socratem ibidem. Et Theophanem in Chronographia XXV. anno Conſtantini.

uſed

uſed to Muſter, as in the *Campus Martius*, called *ſecond or new Rome*, in emulation of old *Rome*, which he deſigned and endeavoured this ſhould equal in all things. Accordingly he endowed it with the ſame Privileges and Immunities, and eſtabliſhed the ſame number of Magiſtrates and Orders of People, and divided the whole extent of it into fourteen Precincts or [c] Regions, according to the diviſion of *Rome*. And the *Greek* Writers were as elegant and extravagant in their commendations of it; but the uſual Title in their ordinary Diſcourſes and Writings, when they had occaſion to mention it without any flouriſh, was ἡ βασιλεύουσα, ἡ βασιλὶς, that is, the Imperial City, to the ſame ſenſe with that of [d] *Sidonius Apollinaris*,

Salve ſceptrorum columen, Regina orientis,
Orbis Roma tui.

The Country about it was afterwards called *Romania* in a limited and reſtrained ſenſe, (for that *Romania* was anciently the ſame with *orbis Romanus*, ſeems clear from [e] *Epiphanius*) and the People Ρωμαῖοι. But I ſuppoſe

[c] *The* Italian *Word* Rione *is a manifeſt corruption of the* Latin *Word.*

[d] In Panegyrico, quem Romæ dixit Anthemio Auguſto, bis Conſuli.

[e] Hæreſi LXIX. quæ eſt Arianorum Sect. 2. *where he ſays a ſad diſmal Fire was kindled by* Arius; πῦρ ἐ τὸ τυχὸν ὁ κατειλήφει πᾶσαν τὴν Ρωμανίαν χθὲς, μάλιστα τ ἀνατολὴς τὰ μέρη, *which ſeized almoſt upon all* Romania, *or* Univerſum Romanorum imperium, *as* Petavius *renders it, but eſpecially the Eaſtern parts of it.*

this was not done till about the middle times of the Empire, when it began to decline. The *Greeks* ſtill retain this Name. For if you ask any of the *Greeks* born upon the Continent of *Thrace*, what Country Man he is? he anſwers forthwith, Ρωμαῖ & *Romios*, for ſo they pronounce it. The *Turks* in like manner call a *Greek* Chriſtian *Urum Gaour*, or the Roman Infidel, as they will call ſometimes the Emperor of *Germany*, *Urumler Padiſha* or Emperor of the *Romans*. Hence it was, that the latter *Græcian* Emperors ſtiled themſelves βασιλεῖς Ρωμαίων, Kings of the Romans, that is, ſuch as were Born in *Romania* and the other Countries, which made up the Eaſtern diviſion of the Empire. Tho' perchance by this flouriſhing Title they pretended a right to the Government of the Weſt: Upon which vain preſumption they aſſumed alſo the Title of Κοσμοκράτορες, or Emperors of the World, as if they had been the true Succeſſors of *Auguſtus*, and the Weſtern Emperors, Uſurpers, whom they called by way of Contempt and Indignation, Ρῆγες, Reges, as [f] *Luitprandus* informs us in the accompt of his Ambaſſy to *Nicephorus Phocas*, and afforded the People of *Italy* no other Title than that of [g] *Longobards* or *Lombards*. The preſent *Greeks* call all the Weſtern Chriſtians Λατῖνοι or φραγγοι *Latins* or *Franks*, the *Turks* only making uſe of the latter, when they ſpeak civilly of us, and calling *Chriſtendom Phrenkiſtan*, in the preſent *Greek* φραγγία. The *Turks* now as proudly call *Conſtantinople Alem pena*, or the refuge of the

[f] Pag. 144, 152, 153. [g] Pag. 139.

World: Where indeed ſeems to be a medly of all or moſt Nations of three parts of it, and of all Religions, which are allowed to be publickly profeſt and exerciſed every where throughout the Empire, except the *Perſian*. For they look upon it as a corruption of, and deviation from the Rules and Doctrine of *Mahomet*, their great falſe Prophet, and therefore abſolutely forbid it, as repugnant to, and deſtructive of the Doctrine of Life and Salvation, as they ſpeak. And accordingly they condemn with all imaginable fury the Profeſſors of it, who pretend to follow *Ali*, as Sectaries and Apoſtates, and entertain worſe Opinions of them, than of *Chriſtians*, or *Jews* or *Infidels*. The *Perſians* are not behind-hand with them in their hatred and diſreſpect, deriding them as groſs and ſtupid, and looking upon them as little leſs then barbarous; Intereſt and Zeal for their ſeveral Tenets heightning their differences ſo much, that in time of War they deſtroy one another's *Moſchs*. I remember, that there was a great Diſcourſe in *Conſtantinople* among the *Turks* concerning an impudent hot-headed *Perſian*, who publickly in the new *Moſch* built by the Mother of the preſent Emperor, aſſerted that *Ali* was equal to *Mahomet*. But it ſeems he very luckily made his eſcape out of their Hands, at which the Prieſts and the more zealous *Turks* were very much ſcandalized.

The *Greeks* have twenty ſix Churches within the Walls of the City, beſides 6 in *Galata*, of which I have given an Account elſewhere. They have alſo two Churches at *Scutari*, one

at *Kadikue* or *Chalcedon*. So at *Stauroſis*, *Chingilkui*, and ſeveral other Villages upon the *Aſian* Shore off the *Boſphorus*, at the *Beſhictaſh*, *Ortakui*, *Chorouch cheſme*, which Church is dedicated to St. *Michael* the Archangel, *Jenikui* or *Neochorion*, *Therapia*, *Bujukdere*, and other Villages on the *European* ſide. They have alſo a Church at *Haskui*, where is their Burying place, and another near the *Bagnio*, dedicated to St. *Paraſceve*. And at *Tatoula* about a Mile from *Pera*, upon a Hill, which from the Name of the Church is thence called by the *Greeks* and *Franks*, St. *Demetrius* his Hill. Next to the holy Virgin, St. *Demetrius* and St. *George* have moſt Churches dedicated to them.

The *Armenians* have not, if I remember aright, above ſeven Churches; they being few in number in compariſon of the *Greeks*.

The *Jews* may have in the City and places adjacent between twenty and thirty Synagogues, this being the greateſt ſhelter of that accurſed and contemptible People in the Grand Signior's Dominions, next to *Caire* and *Saloniki*: and I believe there may be about twenty or thirty thouſand families of them. They are of great uſe and ſervice to the *Turks*, upon accompt of their Brocage and Merchandiſe, and Induſtry in ſeveral mechanical Trades. All theſe I look upon as Natives, or Slaves rather, each paying mony for his Head every year. The *Jews* indeed very wiſely collect this Tax among themſelves, and according to an agreement made with the *Teſtardar* or Treaſurer, pay a certain ſum in groſs for their whole Nation reſiding there: by which piece

of

of cunning they are great gainers, and ſpare the poor among them leſs able to pay, by a contribution of the rich to make up the ſum. The *Engliſh* and *Dutch* Ambaſſadors have their Chapels in their Palaces common to their reſpective Nations.

The Churches and Chapels of the Weſtern *Chriſtians* of the *Roman* Communion in *Galata*, are,

St. *Peter*'s, belonging to the *Dominicans*, where is the famous piece of *Madonna di Conſtantinopolis*, as the *Italians* call it, or of the bleſſed Virgin, holding the holy Child *Jeſus* in her arms: which they pretend to be drawn by the hand of St. *Luke*, celebrated by ſome of the latter Eccleſiaſtical Writers to have been a famous Painter. Out of reſpect to this idle tradition the credulous and ſuperſtitious *Latins* and *Greeks* of the *Roman* Communion ſhew great veneration to it, which otherwiſe hath little in it of proportion, art, or beauty to derive any reputation upon the deſigner, or upon his work.

St. *Francis*, belonging to the *Conventuali*, Fryars of the order of St. *Francis*; the ground of this by the wiſe conduct and interceſſion of *Caviliere Molino*, the Venetian *Bailo*, after the ſurrender of *Candia*, upon the Peace made by the Republick with the Grand Signior, was procured to be reſtored, and a handſome Church rebuilt with the large contributions of mony ſent out of *Chriſtendom*.

St. *Benedict*, belonging to the *Jeſuits*, where is a rich Altar curiouſly adorn'd with ſeveral figures in *Moſiac*. This Convent was purchaſed for them by their great Benefactor, *Hen.* IV. of *France*.

St. *Mary*, belonging to the *Obſervantines* or *Zoccolanti*, a branch of the order of St. *Francis*, ſo called from their going in *Zoccoli* or wooden clogs.

The *Capuchines* have a little Chapel dedicated to St. *George*, hard by the *French* Ambaſſador's Palace.

St. *Ann*, a Chapel frequented by the *Perotes*.

St. *Paul* and St. *Anthony* were both taken away ſome years ſince from the *Chriſtians*, and turned into *Moſchs*. The former of which is now known by the name of *Arab Giameſi*, or the Moſch of the *Arabians*. Our Interpreters mentioned alſo to me the Church of St. *John* which the *Turks* have ſeized upon for their uſe, St. *George*, which the *Jews* are poſſeſt of, and St. *Sebaſtian*, which was uſed to be viſited chiefly on Holy days.

The North-wind blows for the moſt part at *Conſtantinople*. Which muſt be aſcribed to its nearneſs to the *Euxine* Sea, which bears that point from it. So that for want of a Southwardly wind Ships have been forced to lye a month or two ſometimes near the mouth of the *Helleſpont*. This was taken notice of long ſince by *Eunapius* in the life of *Ædeſius*, who aſcribes the ſeldom blowing of the *South* wind to the ſituation of the mountains, where as it is checked and overpowered by the exuberance of the Vapours continually ſent forth from the *black* and *great Sea*, as the *Greeks* call it in compariſon of the *Mediterranean*. *Vide ad finem Codini de origin. Conſtantinopol. Edit. Pariſ. pag.* 80.

The *Helleſpont* is about forty miles in length, and

and at the Caſtles of *Seſtos* and *Abydos* the ſtreight may be about three quarters of an Engliſh mile over, or leſs.

The length of the *Propontis* is about a hundred and fifty miles, both ſhores may be ſeen in the middle of it. In it are,

Cyzicus, an Iſland near the *Aſian* ſhore, to which it is joined by two bridges. It ſtill retains its ancient name Κυξικὸ, and is the ſeat of a Biſhop, being inhabited by a conſiderable number of *Greeks*.

Proconneſus, not far from the former; now, as for ſome centuries paſt, called *Marmora*, from the excellent quarries of Marble there found, the marmor *Cyzenicum* alſo being famous in the time of *Pliny*.

Besbychus, now called by the *Greeks* καλὸλιμνο, or the good haven, not far from the entrance into the bay of *Montanea* to the North and by Eaſt. The *Turks* call it *Imralme*.

There are ſeveral Iſlands over againſt the bay of *Nicomedia*, formerly called *Sinus Aſtacenus*, according to *Strabo*, about ſix or ſeven leagues from *Conſtantinople*. §

Prote, ſo called becauſe they approach firſt to it, coming from *Conſtantinople*; to the South of this *Prencipe* and *Pytis*, which I take to be the ſame with *Pyrgos*, that lies inmoſt toward the bay: *Chalcitis*, in modern Greek, *Chalce* or *Chalcis*. *Oxia* and *Platy* to the North-weſt. I have expreſſed the *Turkiſh* names of the leſſer and uninhabited Iſlands elſewhere, which perchance were phantaſtically impoſed by ſome *Franks*.

§. v. Gillium de Boſp. Thracio lib. III. cap. 12. &c.

The *Seraglio* is at the extreme point of the North-eaſt Angle of *Conſtantinople*, where formerly ſtood old *Byzantium*, within which towards the Haven is a ſtately *Kiosk* or ſummer houſe, from whence the *Grand Signior* uſually takes Barge, when he paſſes into *Aſia*, or diverts himſelf upon the *Boſphorus*, at which time the *Boſtangi Baſhi*, who hath the principal care of the Emperor's Palace, and hath the command of the *Boſphorus*, ſits at the helm and ſteers.

The ſeven Towers are at the South-eaſt extremity.

The only Suburbs are to the North-weſt, along the Haven-ſide; for above the hill, where the three walls begin, lies an open champaign Country, except that here and there at conſiderable diſtances farm houſes are ſcatter'd.

The Haven runs in from the Weſt, and ſo opens Eaſt.

At the Eaſt end of *Galata* is *Tophana*, where they caſt their great Guns.

Pera and *Galata* have about ſix gates to the Sea-ward. The whole tract of ground was anciently, before the times of the Emperor *Valentinian*, who encloſed and fortified *Galata* with walls and towers, ſtyled Περαῖα or *Regio Peræa* being πέραν τῆ πόλεως, on the other ſide of the City to the North, which is the reaſon of its name, ſeated on higher hills, and whoſe aſcent is more ſteep and difficult.

Our modern *Geographers*, ſuch as *Mercator* and *Ortelius*, who herein follow *Ptolomy*, place *Conſtantinople* in the Latitude of 43. degrees and 5 minutes: the *Arabian* and *Perſian Aſtronomers*,

nomers, as *Abulfeda*, *Naſſir Edin*, *Vlugh Beigh*, and ſo the προχειροι κανονες, *Chryſococcas* tranſlated out of the *Perſian* tables, place it more Northerly in 45. But by latter and better obſervation it is found, that they have erred in aſſigning the Latitude of this City, as of ſeveral other places. To ſalve theſe differences, there is no juſt ground of pretence to ſay, that the *Poles* are moveable and have changed their ſituation ſince their time, whereas it may better be imputed to their want of due care, or to their taking things upon truſt, from the reports of *Travellers* and *Seamen*, not having been upon the places themſelves: which certainly is to be ſaid for *Ptolomy*, whoſe obſervations, as to places more remote from *Alexandria*, are far from being accurate and true. The learned Mr. *John Greaves*, as I find in a Manuſcript diſcourſe, very worthy of being printed, which he preſented to the moſt reverend and renowned *Arch-biſhop Uſher*, took the height of the *Pole* at *Conſtantinople* with a braſs ſextant of above 4 feet *radius*, and found it to be but 41 degrees 6'. but by the obſervation we made in our Court-yard at *Pera* with a very good *Quadrant* we found it but 40 degrees and 58 minutes of North Latitude.

There is no place between the *Propontis* and the walls of the City, except juſt at the Seraglio-point, which may be two hundred paces in length; where they have raiſed on a platform a battery for Great guns; but from the point to the end of the Haven Weſt, the ſpace to the gates is unequal in ſome places about twenty paces broad, in others three or four times as many more. The

The diſtance between *Conſtantinople* and *Chalcedon* upon the oppoſite *Bythinian*-ſhore may be about three or four miles.

In the Walls are engraven the Names of ſeveral Emperors, who reigned toward the declenſion of the *Græcian* Empire, as *Theophilus*, *Michael*, *Baſilius*, *Conſtantius Porphyrogenitus*, by whoſe care, and at whoſe expence the ſeveral breaches cauſed in them by the Sea or by Earth-quakes, were repaired.

Kumkapi or the ſand-gate lies toward the *Propontis*; this the *Greeks* call in their vulgar language Κονδοσκάλι, *Contoſcalium*, or the little ſcale or landing-place. Here formerly was an Arſenal for Gallies and other ſmall veſſels; it being a convenient paſſage over Sea. Over this Gate was anciently engraven a curious Inſcription ſtill preſerved in that excellent collection publiſhed by [h] *Gruterus*.

Jedicula Kapi, or the Gate of the ſeven Towers, ſo called from its nearneſs to that *Acropolis*, is that, I gueſs, which the *Greeks* formerly called χρυσῆ or the Golden Gate, and by ſome late *Latin* Writers *Chryſea*, in *Luitprandus*, *Carea*, by a miſtake either of the Tranſcriber or Printer, for *Aurea*, for ſo certainly it muſt be mended. Over this Gate was this inſcription,

Hæc loca Theudoſius decorat poſt fata Tyranni
Aurea ſecla gerit, qui portam conſtruit auro

cited by *Sirmond* in his notes upon [i] *Sidonius*. This Gate is in the twelfth Region, and was

[h] Pag. 169. Num. 3. [i] Pag. 121.

alſo

alſo called ὡραῖα from its beautiful and curious ſtructure.

The Gun gate formerly called Roman gate, not becauſe it leads towards the continent of *Romania* or *Thrace*, but from [k] St. *Romanus*, where the laſt Chriſtian Emperor was killed at the aſſault which the *Turks* made to force their Way into the City by it.

Near *Adrianople* gate is a fair large *Moſch* called *Ali-baſſa*, upon a hill accounted the higheſt in the City.

The diſtance between tower and tower in the upper wall to the landward may be about ninety of my paces; the ſpace between that and the ſecond wall about eighteen paces over.

The place, where the *Lyons*, *Leopards*, and ſuch like wild creatures are kept, (where I ſaw alſo ſeveral *Jackalls*) was formerly, as the *Greeks* told me, a Chriſtian Church dedicated to Παναγία, or the Bleſſed Virgin, where this Verſe is ſtill legible,

Κατὰ Σκυθῶν ἔπνευσας θερμὸν ἐν μάχαις.

There is no tide or running back of the water on any ſide of the *Boſphorus* into the black Sea, as [l] ſome have imagined, whoſe miſtake might poſſibly ariſe hence, that the wind being at North, and blowing hard, the current ſets more violently at ſuch times againſt the ſeveral headlands jetting out into the channel, which admits of ſeveral turnings, and

[k] Vid. Hiſtoriam Politicam Conſtantinopoleos apud Cruſium in Turco-Græcia, pag. 9.

[l] This was an old error; for thus writes *Dionyſius Byzantinus* in his little Book of the *Boſphorus*. Τοῦ ῥεύματος τὸ μὲν πλεῖον κατιόντος ἐστὶ δ' ὅτε κατ' ἐπικράτειαν ἀναφέροντος.

ſo

ſo the waters are forced back to ſome little diſtance: or elſe becauſe when the South-wind freſhens and grows boiſterous, it makes a high rolling Sea in the *Propontis* and *Boſphorus*, and being contrary to the current, gives a check to it, ſo that it becomes leſs ſenſible, and is eaſily ſtemmed. Where it is narroweſt, the diſtance ſeems to the eye to be ſcarce a mile over from one ſhore to another; where broadeſt, not much above a mile and a half, unleſs where it runs into the deep Bays, which by reaſon of their ſhallowneſs only harbour Boats.

The channel certainly is natural and not cut by art, as ſome have idly fancied, not conſidering, how the *Euxine* Sea ſhould diſcharge it ſelf otherwiſe of thoſe great quantities of waters, poured into it by the *Iſter* and *Tanais*, now called *Don*, and the other Rivers, whereby it becomes leſs ſalt, even very ſenſibly to the taſt, than ſeveral parts of the *Mediterranean*.

The Fiſh, by a ſtrange kind of inſtinct, paſs in vaſt ſhoals twice a year, Autumn and Spring, through the *Boſphorus*, that is, out of one Sea into another; of which the *Greeks*, who live ſeveral months of the year upon them, take great numbers, and ſupply the markets at eaſie rates; the Cormorants and other ravenous water-fowl, which the *Turks* will not ſuffer to be deſtroy'd or otherwiſe moleſted, preying upon them.

The weather in ſome months is very inconſtant, great heats and colds happening the ſame day upon the change of the wind.

The winters at *Conſtantinople* are ſometimes extraordinary ſevere. I have heard it related by

by ſeveral old *Greeks*, as a thing moſt certain, that the *Boſphorus* was frozen over in the time of *Achmed*, and that a Hare was courſed over it. It hapned thus, that upon a thaw huge cakes of Ice came floating down the *Danube* into the black Sea, and were driven by the current into the *Boſphorus*, where upon the return of the froſt, they were fixed ſo hard that it became paſſable. In the year 1669 there was Ice in the Haven to the great amazement of the *Turks*; and ſome were ſo frighted at this unuſual accident, that they lookt upon it as a diſmal prodigy, and concluded, that the World would be at an end that Year. The *Aguglia* or *Obelisk* in the *Hippodrome* is betwixt fifty and ſixty Foot high.

The Hiſtorical Pillar in *baſſo relievo*, raiſed in honour of the Emperors *Arcadius* and *Honorius*, may be in height about an hundred ſeven and forty feet.

Alexius Comnenus lies buried in the Patriarchal Church againſt the wall, and his daughter *Anna Comnena*, the Hiſtorian, who lived about the year of Chriſt 1117. They pretend to ſhew there the reliques of St. *Anaſtaſia*, who ſuffered Martyrdom under the Emperor *Valerianus*, and of St. *Euphemia*, Virgin and Martyr, who loſt her life moſt gloriouſly for *Chriſt's* holy religion at *Chalcedon* under *Diocleſian*.

In *Sancta Sophia* there are pillars ſo great, that a Man can ſcarce fathom them at twice. At the end of the Gallery, that joins the other two, each about thirty of my paces wide, there is a piece of tranſparent Marble, two or three Inches thick. In the North gallery upon the Pavement is a reddiſh ſort of a Mar-

ble Stone, brought, as the *Turks* and *Chriſtians* relate, from *Paleſtine*, on which they Fable, that the bleſſed Virgin uſed to waſh the linen of our Saviour.

I obſerved but one ſtep from the Body of the Church to the *Bema* or place where the Altar formerly ſtood.

The great *Moſch* at *Chaſim-baſſa* on *Pera* ſide to the Weſt, was formerly a Church dedicated to St. *Theodoſia*.

Gianghir, a Moſch ſo called, upon a hill at *Fondaclee* near *Tophana*.

In *Conſtantinople* there are ſeveral narrow ſtreets of Trade, cloſed up with ſheds and pent-houſes, which I ſuppoſe were in uſe before the *Greeks* loſt their Empire, and are the ſame with the σκεπαζοὶ καὶ φραχλοὶ δρόλοι in *Chryſaloras* his [m] Epiſtle. But beſides theſe places, ſeveral Trades have their diſtant quarters. The ſtreets are raiſed for the moſt part on each ſide for the greater convenience.

[m] Pag. 119.

Not far from *Suleimania* is the houſe of the *Aga* or General of the *Janizaries*, which ſo often changes its Maſters.

Pompey's pillar, as the *Franks* erroneouſly call it, is of the *Corinthian* order, curiouſly wrought, about eighteen foot in height, and three in Diameter.

Beſhiktaſh, a Village within three or four miles of *Conſtantinople* towards the *Boſphorus*, where lies buried the famous Pyrate *Ariadin*, whom the *Chriſtian* Writes call *Barbaroſſa*, who built here a handſome Moſch, having two rows of Pillars at the entrance. The Captain *Baſſa* uſually, before he puts to Sea with

with his Armata of Gallies, viſits the Tomb of this fortunate Robber, who had made ſeveral thouſand *Chriſtians* Slaves, and makes his Prayers at the neighbouring Church for the good Succeſs of his expedition.

They reckon in the City above a hundred publick Baths, every ſtreet almoſt affording one. They are eſteemed works of great Piety and Charity; there being a continual uſe of them, not only upon the accompt of Religion, but of Health and Cleanlineſs. For their Dyet being for the moſt part hot ſpiced Meats in the Winter, and crude fruits in the Summer, their Liquor Fountain Water, or Coffee, to which we may add their lazy kind of Life (for walking is never uſed by them for digeſtion or otherwiſe in the way of diverſion) frequent bathing becomes neceſſary.

There are ſeveral receptacles of Water under Ground, and one particularly under the Church of *Sancta Sophia*, as I was informed; but I did not think it worth my curioſity to deſcend into it. Theſe were of great uſe to the poor *Greeks* in the laſt fatal Siege; but the *Turks* are ſo ſecure, that they do not think that they deſerve either coſt or pains to keep the Waters ſweet, or the ciſterns in repair.

The *Aqueducts*, which anſwer to thoſe glorious *Aqueducts* near *Pyrgos*, and convey the water to the great ciſtern near Sultan *Selim*'s Moſch, are in that part of *Conſtantinople*, which lies between the Moſch of *Mahomet* the Great and *Shaxade*.

The *Turks* began to beſiege *Conſtantinople* on the fifth of *April*, and took it the twenty ninth of *May* on *Whitſon Tueſday* morning 1453. or

453. or as the *Turks* reckon in the year 857. of the *Hegira*, or flight of *Mahomet*, the 22d day of the firſt *Jomad*.

The Chapel, where *Ejub Sultan* is interred, at whoſe Head and Feet I obſerved great wax Candles, is encloſed with latten wire Grates, for the better accommodation of ſuch religious *Turks* as come to pay their reſpect to the memory of this great *Muſulman* Saint. In the middle of the Area there is raiſed a building ſuſtained by excellent marble Pillars, aſcended by two ſeveral pair of ſtairs, where the new Emperor is inaugurated, and where he uſually goes in *Biram*-time.

An Account of the City of Prusa *in* Bithynia, *and a Continuation of the Historical Observations relating to* Constantinople, *by the Reverend and Learned* Thomas Smith *D. D. Fellow of* Magd. Coll. Oxon. *and of the* Royal Society.

Montanea formerly called *Nicopolis* according to *Bellonius*, or rather *Cios*, the Bay hence called *Sinus Cianus*, lies in the bottom of a Bay about fourscore Miles from *Constantinople*, and is the Scale or Landing-place for *Prusa*, from which it may be about twelve Miles; in the middle way to which is the Village *Moussanpoula*.

Prusa, now called by the *Turks Bursia*, the chief City of *Bithynia*, is seated at the foot partly, and partly upon the rising of the Mount *Olympus*, which is one of the highest Hills of the lesser *Asia*. Its top is covered with Snow for nine or ten Months of the Year, several streams of Water flowing down the Hill continually, accounted very unwholesome from the Snow mixed with it. In the upper part of the City to the Northwest lies the Seraglio which is walled round; but the Emperors not

reſiding here ſince their acqueiſts in *Thrace*, or ſcarce making viſits to this Imperial City, and none of their Sons living here of late, according to the former Policy of the *Turkiſh* Emperors, who did not permit their Sons, when grown up, to be near them, but ſent them to ſome Honourable Employment, accompanied with a Baſſa and Cadi to inſtruct them in the Arts of War and Government, it lies now neglected and deſpoiled of all its ornaments.

In this part alſo are the Sepulchers of *Oſman*, the founder of the Family, which now reigns, and his Son *Urchan*, who took the City, near a Moſch, formerly a *Chriſtian* Church dedicated to St. *John*, and where was formerly a Convent of Religious, built by *Conſtantinus Iconomachus*, where I ſaw the figure of a Croſs ſtill remaining upon the Wall. Here hangs up a Drum of a vaſt bigneſs, ſuch as they carry upon the backs of Camels, and I ſuppoſe is one of thoſe which they uſed in the taking the Place.

In the lower part, near the bottom of the Hill, *Morad* the ſecond, the Father of *Mahomet* the Great, lies buried: near whereunto was formerly the Metropolitical Church of the *Holy Apoſtles*. The *Bezeſten*, or Exchange, ſeems to be much better and larger than the great one at *Conſtantinople*, as are the ſeveral Caravanſerais built for the uſe and accommodation of Merchants, and Travellers; in one of which, the Rice Chane, I took up my quarters.

Without the City toward the Eaſt is the Moſch and Sepulchre of the Emperor *Bajazid* the

the firſt, whom the *Turks* call *Jilderim* or Lightning, and the Greek Writers λαίλαψ. Not far from hence is the Moſch of *Mahomet* the firſt, and his Sepulchre. Toward the Weſt upon the ſide of the Hill is the Moſch of *Morad* the firſt, whom they call *Gazi* or the Conqueror, near which he lies buried. There are in the whole about 124 Moſchs, ſeveral of which were formerly *Chriſtian* Churches, and between fifty and ſixty Chanes. The Caſtles built by *Oſman*, when he beſieged the City, are ſlighted and altogether unfortified; the one to the North, the other to the South-Weſt

At *Checkergh*, about a mile and a half out of Town, are the hot Baths, much frequented both by *Chriſtians* and *Turks*. They are made verry Convenient to Bath in, and are covered over, that they may be uſed in all Weathers. Among others, there is a large round *Baſin*, where they uſually divert themſelves by Swimming

What opinions the *Turks* have of our Bleſſed *Saviour* and the *Chriſtian* Religion, I ſhall briefly ſhew, as they lie diſperſed in ſeveral Chapters of the *Alcoran*, according to which they frame their Diſcourſe, whenſoever either Zeal or Curioſity puts them upon this Topick. For *Mahomet* upon his ſetting up to be the Author of a new Religion, finding ſuch a conſiderable part of the World profeſſing the Doctrine of *Chriſt*, with all the Myſteries of Faith therein contained, was caſt upon a neceſſity of ſaying ſomething both concerning Him and It. By which it will appear, how great the Power of Truth is above Impoſture

and Subtility; and that as the Devils in the Poſſeſſed confeſs'd, though againſt their Wills, *Chriſt* to be the Son of *God*, ſo this *Dæmoniack* in the midſt of all his Forgeries and Lies, and ridiculous and childiſh Narratives, not being able to contradict the univerſal Belief of the *Chriſtians* of that, and the preceding Ages, founded on the Hiſtory of the Goſpel, hath been forced to give Teſtimony to ſeveral Particulars of it.

They confeſs then that *Chriſt* was born of a pure ſpotleſs Virgin, the Virgin *Mary*, choſen by *God*, and ſanctified above all the Women in the World; and that the Angel *Gabriel* was diſpatched out of Heaven to acquaint her with the News of it. That ſuch a kind of miraculous and ſupernatural Birth never hapned to any beſides, and that *Chriſt* was conceived by the *Holy Ghoſt*, and that he wrought mighty Miracles; for Inſtance, that he cleanſed Lepers, gave ſight to the Blind, reſtored ſick Perſons to their Health, and raiſed the Dead.

That he is a great Prophet, ſent by *God* to convert Men from the Vanity and Error of their falſe Worſhip to the Knowledge of the true *God*, to preach Righteouſneſs, and to correct and reſtore the Imperfection and Miſcarriages of Humane Nature; that he was of a moſt holy and exemplary Life, that he was the true Word of *God*, the *Apoſtle* or *Ambaſſador* of *God*; that his Goſpel was revealed to him from Heaven, and that he is in Heaven ſtanding nigh to the Throne of *God*. They blaſpheme indeed with a Bruitſhneſs and Stupidity only befitting *Turks*, the Myſte-

Myſteries of the *Holy Trinity*, and of the Divinity of our *Bleſſed Saviour*, and deny that he was put to Death, and ſay that another in his ſhape was crucified by the *Jews*, and that he himſelf was aſſumed into Heaven in his Body without dying at all, and conſequently they will not own, that he ſatisfied Divine Juſtice for the Sins of the World; ſo great an Affinity is there between the Hereſie of *Socinus* and profeſs'd *Mahometaniſm*.

I could never yet ſee any *Turkiſh* Tranſlation of the *Alcoran*; they cry up the Elegance of the Style, which being enthuſiaſtick and high-flown, by reaſon alſo of the tinckling of the Periods, is very delightful to their Ears, who ſeem to be affected with Rhime mightily. Though I ſuppoſe it is upon a more politick Account, that they are ſo averſe, as to the tranſlating it into their vulgar Language, not out of reſpect to the Sacredneſs of the Original only, whoſe full commanding Expreſſions they think cannot be tranſlated without a great diminution to the Senſe; but to keep it in greater Veneration among the People, who might be apt to ſlight and diſeſteem it, ſhould it become thus common among them. It is enough, that the Prieſts and Learned Men explain the difficult Paſſages of it to the People, and write Commentaries for the uſe of the more Curious and Inquiſitive. The *Perſians* on the contrary think it no Diſparagement to the *Arabick*, or Profanation of the Senſe to tranſlate this curſed Book into their own Language, and Copies are frequent among them.

ctice at set times before the People, which they would do so long, till they were giddy by this swift circular Motion, and fell down in a Swoon, and then oftentimes upon their recovery from such Trances, they pretended to Revelation. The Churchmen are not very kind to his Memory, looking upon him as a Man of little or no Religion; and they give out, that if he had lived, he would have forbid their calling to Prayers from the Spires of their Moschs, and hanging out Lamps; both which they look upon as solemn and essential to the Exercise of Religion; but he as the effect of Bigotry and Superstition.

They have a mighty Honour and Esteem for Physicians, for though they are of Opinion, that they cannot with all their Art prolong Life, the Period and Term of it being fatal, and absolutely determin'd by God; yet they often consult them upon any violent Sickness or Pain, in order to make the time allotted them in this World more pleasant and easie. It is extaordinary rare that a natural *Turk* makes Physick his Profession and Study. They who practise it among them, when I was in *Turky*, were for the most part *Greeks* and *Jews*, who know nothing of Chymical Medicines, but follow the usual Methods, which they learnt in *Italy* and *Spain*, the former having studied in *Padua*, and the latter in *Salamanca*, where they pass for good *Catholicks*. And I remember I met with a certain *Jew* Physician, who had been a Capuchine in *Portugal*. During the tedious Siege of *Candia*, the *Vizir*, what with the melan-

melancholy, and what with the ill Air of the Camp, finding himſelf much indiſpos'd, ſent for a *Chriſtian* Phyſician *Signior Maſſalins*, a Subject of the Republick of *Venice*, but married to a *Greek* Woman, by whom he had ſeveral Children, who was our Neighbour at *Pera*, an experienc'd able Man, to come ſpeedily to him, and made him a Preſent of about a thouſand Dollars, in order to fit himſelf for the Voyage and bear the Expence of it. By this worthy Gentleman's Care, he recovered his Health, and would not permit him to depart, till after the Surrendry of that City, which might be about ſeven Months after his Arrival there, treating him in the mean while with all imaginable Reſpect. During our ſhort ſtay at *Burſia*, one of our *Janizaries* accidentally diſcourſing with a *Turk* about us, whom they knew to be *Franks*, told him that there was a Phyſician in the Company, who had been lately at the Grand *Signior*'s Court at *Saloniki* with the *Engliſh* Ambaſſador, and was now upon his return from *Conſtantinople* to *Smyrna*, where he lived. This preſently took vent, and the *Turks* thought that they had got a Man among them, that could cure all Diſeaſes infallibly; for ſeveral immediately came to find us out in behalf of themſelves or their ſick Friends, and one of the moſt conſiderable Men upon the Place, deſir'd the Doctor to go to his Houſe to viſit one of his Women ſick in Bed, who being permitted to feel her naked Pulſe (for uſually they throw a piece of fine Silk or Curl over their Womens Wriſts at ſuch times) ſoon diſcovered by that and other Symptoms and

Indications of her Diſtemper, that opening a Vein would preſently give her Eaſe and recover her: which he did accordingly; for which he received an embroidered Handkerchief inſtead of a Fee, and gained the Reputation of having done a mighty Cure.

They have little of Ingenious or Solid Learning among them; their chief Study, next to the *Alcoran*, being metaphyſical Niceties about the Attributes of *God*, or elſe the Maintenance of other odd ſpeculative Notions and Tenets, derived down to them from ſome of their famed Maſters and Holy Men, whom they pretend to follow. Their Knowledge of the motion of the Heavens, for which the *Arabians* and the other Eaſtern Nations have been ſo deſervedly famous, as their Aſtronomical Tables of the Longitude and Latitude of the fixed Stars, and of the appulſe of the Moon to them, fully evince, is now very mean, and is chiefly ſtudyed for the uſe of judiciary Aſtrology. The great Inſtrument they make uſe of is an Aſtrolabe, with which they make very imperfect Obſervations, having no ſuch thing as a Quadrant or Sextant, much leſs a Teleſcope, or any mechanical Engine, to direct and aſſiſt them in their Calculation. Their Skill in *Geography* is as inconſiderable; I remember I heard the Captain Baſſa, whom they ſtile Admiral of the Black and White Seas, meaning the *Euxine* and the *Mediterranean*, ask this ſilly Queſtion, whether *England* where out of the Streights? and at another time the *Caymican* or Governor of *Conſtantinople*, hearing that *England* was an Iſland,

deſir-

deſired to know, how many Miles it was about, in order, we ſuppoſed, to make an eſtimate of our King's Greatneſs and Strength by the extent and compaſs of it.

One of the great Aſtrologers of *Conſtantinople*, having heard that I had a pair of Globes in my Chamber, made me a Viſit on purpoſe to ſee their Contrivance, being introduced by a worthy Gentleman of our own Nation: After the firſt Ceremonies were over, I took my Terreſtrial Globe, and rectified it to the poſition of the Place, and pointed to the ſeveral Circles both without and upon it, and told him in ſhort the ſeveral uſes of them: Then ſhewed him how *Conſtantinople* beared from *Candia* at that time beſieged, *Cair*, *Aleppo*, *Mecca*, and other chief Places of the Empire, with the other Parts of the World: At which he was mightily ſurprized to ſee the whole Earth and Sea repreſented in that Figure and in ſo narrow a compaſs, and pleaſed himſelf with turning the Globe round ſeveral times together. Afterwards I ſet before him the Celeſtial Globe, and rectified that, and ſhewed him how all the noted Conſtellations where exactly deſcribed, and how they moved regularly upon their Poles, as in the Heavens; ſome riſing, and others ſetting, ſome always above the Horiſon, and others always under, in an oblique Sphere, and particularly what Stars would riſe that Night with us at ſuch an Hour; the Man ſeemed to be raviſhed with the Curioſity of it, turning this Globe alſo ſeveral times together with his Finger, and taking a mighty Pleaſure in viewing the motion of it: and yet this ſilly Animal

paſt

paſt for a Conjurer among the *Turks*, and was look'd upon as one that could foretel the Events of Battels, the Fates of Empires, and the End of the World.

They have no Genius for Sea-Voyages, and conſequently are very raw and unexperienc'd in the Art of Navigation, ſcarce venturing to ſail out of ſight of Land. I ſpeak of the natural *Turks*, who trade either into the *Black Sea*, or ſome part of the *Morea*, or between *Conſtantinople* and *Alexandria*; and not of the Pyrates of *Barbary*, who are for the moſt part Renegado's, and learn'd their Skill in Chriſtendom, which they exerciſe ſo much to the Terror and Damage of it. A *Turkiſh* Compaſs conſiſts but of eight Points, the four Cardinal and four Collateral; they being at a mighty Loſs how to ſail by a ſide Wind, when by hauling their Sails ſharp, they might lie their Courſe, and much more, when they are in the Wind's Eye, not knowing how to make Tacks and Boards, but chooſe rather to make haſt into ſome neighbouring Port, till the Wind blows fair. An *Engliſh* and *Turkiſh* Veſſel both bound for the Bay of *Saloniki*, at the time of the Grand Signior's being there, paſt together out of the *Helleſpont*; but foul Weather happening, the *Turks* got into *Lemnos*; while our Men kept at Sea and purſued their Voyage, and after three Weeks ſtay returned back to us, obſerving in their way, that the *Turks* remained in the ſame place where they left them, for want of a Fore-Wind to put to ſea in.

They

They trouble not themſelves with reading the Hiſtories of other Nations or of ancient Times, much leſs with the Study of *Chronology*, without which, Hiſtory is very lame and imperfect; which is the cauſe of thoſe ridiculous and childiſh Miſtakes, which paſs current and uncontradicted among them. For inſtance, they make *Job* one of *Solomon's* Judges, and *(Iſcander) Alexander* the Great Captain General of his Army. They number *Philip* of *Macedon* among the Anceſtors of our *Bleſſed Saviour*, and believe that *Sampſon*, *Jonas* and St. *George* were his Contemporaries. In this they are more excuſable than their falſe Prophet *Mahomet*, who in his *Alcoran* has perverted ſeveral Hiſtorical Notices in the Writings of the Old Teſtament, and is guilty of vile and abſurd Pſeudo-chroniſmes. To remedy this Defect, of which he was very conſcious, and the better to underſtand the States of *Chriſtendom*, and the particular Kingdoms and Republicks of it, the late great and wiſe *Vizir*, *Achmet*, made his Interpreter *Panagiotti*, a Learned *Greek*, at leiſure Hours, even at the Siege of *Candia*, as well as at other times, read ſeveral ancient Hiſtories to him, and render them *extempore* into the *Turkiſh* Language, and particularly *Blacus Atlas*, with which he was mightily pleaſed, and made great uſe of, and truly gained the Reputation of a ſolid and judicious States-man, as well as Soldier, among the *Chriſtian* Miniſters, who in the ordinary courſe of their Negotiations apply'd themſelves to him.

Tho'

Tho' their Year be according to the courſe of the Moon, and ſo the *Turkiſh* Months run round the civil Year in a Circle of thirty three Years and a few odd Days, yet they celebrate the *Neuruz*, which ſignifies in the *Perſian* Tongue the New Year, the twenty firſt Day of *March* (on which Day the vernal Equinox was fixed by the *Greeks* and other Oriental *Chriſtians*, in the time of the Emperor *Conſtantine*, who made no Proviſion for the προήγησις ἰσημερινὴ, or Preceſſion, which in proceſs of Time the inequality between the Civil and Aſtronomical Year muſt neceſſarily produce) at which time the *Cadyes* and other annual Magiſtrates, and Farmers of the Cuſtoms take Place, and reckon to that Day twelve Month again.

In their civil Deportment and Behaviour one towards another, the left Hand is the more worthy and honourable Place, except among their Eccleſiaſticks; and the Reaſon they alledge is, becauſe they write from the right Hand, and the Sword is worn on the left ſide, and ſo is more at his diſpoſal, who walks on that Hand. The chief *Vizir* accordingly in the *Divan* ſits at the left Hand of the *Mufty*, each maintaining their Right of Precedence according to this way of deciſion.

In their Moſchs they ſit without any diſtinction of degrees.

Some of the more zealous *Turks* cauſe to be engraven on their Scymitars and Bucklers a Sentence out of the ſixty firſt *Surat*, which is concerning Fighting or Battle-array, and contains Encouragements to fight in the *Way*

and

and Paths of God, as the Impoſtor words it; for which he aſſures them, beſides aſſiſtance from Heaven to help them to get the Victory over their Enemies, that *God will pardon their Sins and bring them to Paradice.* Thus ſpirited with Zeal, a *Turk* lays about him with Fury, when he is a fighting, and ſeems ambitious of dying to gain the Delights of Paradice, at leaſt indifferent whether he dies or lives.

The *Turks* are as to their Temper ſerious, or rather inclining to Moroſity, ſeldom laughing, which is accounted an argument of great Vanity and Lightneſs. They perform the Exerciſes, which they uſe in the way of Diverſion, as Shooting and Hunting, with a great deal of Gravity, as if they deſigned them more for Health than for Pleaſure; and this too but ſeldom. The better and richer ſort, who have nothing to do, ſitting all Day at Home, lolling upon a Sofa or rais'd Place in their Rooms, and taking Tobacco, which their Slaves fill and light for them: And if they retire in the Summer or Autumn, for a Week or Fortnight to ſome convenient Fountain in a Wood with their Women, it is chiefly to enjoy the Refreſhments of the cool Air. In the times of Triumph indeed for ſome great Succeſs obtained againſt the *Chriſtians*, when the Shops are open for three Nights together, and hung with Lights, as well as the Spires of the Moſchs in curious Figures, they are guilty of extravagant Mirth, running up and down the Streets in Companies, and ſometimes Singing and Dancing after their rude way; but this fit being

over, they ſoon return to their former Melancholy. In the Coffee-Houſes where they uſe to reſort to tipple, there is uſually one hired by the Owners to read either an idle Book of Tales, which they admire as Wit, or filthy obſcence Stories, with which they ſeem wonderfully affected and pleaſed, few of them being able to read. Theſe are the Schools, which they frequent for their Information, tho' in times of War, when things went ill with them, their Diſcourſes would be of the ill Government; and the Grand Signior himſelf and his chief Miniſters could not eſcape their Cenſures, which manifeſtly tending to Sedition, and to the heightning of their Diſcontents by their mutual Complaints, and by this free venting of their Grievances during the War at *Candia*, the wiſe Vizir ſeeing the evil Conſequences that would follow, if ſuch Meetings and Diſcourſes were any longer tolerated, commanded, that all the publick Coffee-houſes ſhould be ſhut up in *Conſtantinople* and ſeveral other great Cities of the Empire, where the Malecontents uſed to rendezvous themſelves, and find fault upon every ill Succeſs and Miſcarriage with the Adminiſtration of Affairs.

The Cuſtom of the *Turks* to ſalute the Emperor or the *Vizir Baſſa's* with loud Acclamations and Wiſhes of Health and long Life, when they appear firſt in their Houſes or any publick place, is derived from the *Greeks*, who took it from the *Romans*. This was done by them in a kind of ſinging Tone; whence *Luitprandus* Biſhop of *Cremona* tells us, that

in

in a certain Proceſſion (πρόελυσις) at which he was preſent, they Sang to the Emperor *Nicephorus* πολλὰ ἔτη, that is, many Years, (which *Codinus*, who lived juſt about the taking of *Conſtantinople*, by the *Turks*, expreſſes τὸ ψάλλειν τὸ πολυχρόνιον or by τὸ πολυχρόνιζειν and the wiſh or ſalute by πολυχρόνισμα) and at Dinner the *Greeks* then preſent wiſh'd with a loud Voice to the Emperor and *Bardas*, *ut Deus annos multiplicet*, as he tranſlates the *Greek*.

The *Turkiſh* Coin in it ſelf is pitiful and inconſiderable, which I aſcribe not only to their want of Bullion, but to their little Skill in matters relating to the Mint. Hence it comes to paſs that Zecchines and Hungars for Gold, and *Spaniſh* Dollars and Zalotts for Silver ſtampt in *Chriſtendom* paſs current among them, moſt of the great Payments being made in them, they not caring either thro' Ignorance or Sloth to follow the Example of the *Indian* or *Perſian* Emperors, who uſually melt down the *Chriſtian* Money imported by the Merchants into their ſeveral Countries, and give it a new Stamp. The moſt uſual pieces are the Sheriphi of Gold, ſomewhat leſs in value than a *Venetian* Zecchine, and Aſpers; ten of which are equal to ſix Pence *Engliſh*, and ſome few three Aſper Pieces. A Mangar is an ugly old Copper Piece, eight of which make but one Aſper, and is not I think a *Turkiſh* Coin, but rather *Greek*. They have no Arms upon their Coin, only Letters emboſſed on both ſides, containing the Emperor's Name, or ſome ſhort Sentence out of the *Alcoran*.

The *Turks* look upon Earthquakes as ominous, as the vulgar do upon Eclipſes, not

underſtanding the Philoſophy of them. During my ſtay in *Conſtantinople*, which was above 2 Years, there hapned but one, which was *October* 26. 1669. about ſix a Clock in the Morning a ſtark Calm preceding. It laſted very near a Minute, and we at *Pera* and *Galata* were as ſenſible of it, as thoſe who were on the other ſide of the Water; but praiſed be God nothing fell, and we were ſoon rid of the Fears in which this frightful Accident had caſt us, being in our Beds, and not able by reaſon of the Surprize in ſo little a ſpace to have paſt through a Gallery down a pair of Stairs into the Court, if we had attempted it. The *Turks* made direful Reflexions on it, as if ſome Calamity would inevitably fall upon the Empire, quickly forgetting the great Triumphings and Rejoycings which they expreſt but a few Days before for the Surrendry of *Candia*. In the Year 1668. in *Auguſt*, the Earth ſhook more or leſs for forty-ſeven Days together in the leſſer *Aſia* at *Anguri* (*Ancyra*), and for fifteen at *Bacbaſar*, as we heard from a *Scotch* Merchant, who liv'd there: And particularly, that at this latter Place on the ſecond of *Auguſt*, between three and four of the Clock in the Afternoon it laſted for a quarter of an Hour; ſeveral Houſes were overthrown, and ſome hundreds of Chimneys fell (it being a very populous Town) and yet there were but ſeven kill'd. The trembling being ſo violent, both *Turks* and *Chriſtians* forſook their Houſes, and betook themſelves to the Fields, Vineyards, and Gardens, where they made their Abode for ſeveral Days.

Their

Their Puniſhments are very ſevere, this being judg'd the moſt effectual way to prevent all publick Diſorders and Miſchiefs. They uſe no great Formality in their Proceſſes: If the Criminal be taken in the Fact, and the Witneſſes ready and preſent to atteſt it, and ſometimes if there be but probable circumſtances, without full Conviction, condemn him; and ſoon after Sentence, ſometimes an Hour, or leſs, hurry him away to Execution. For an ordinary Crime, hanging is the uſual Death: But for Robbery and Murder, committed upon the High Way by ſuch as Rob in Parties and alarm whole Provinces, or for Sacrilege, or for any heinous Crime againſt the Government, either Gaunching or Excoriation, or cutting off the Legs and Arms, and leaving the Trunk of the Body in the High Way, or Empaling, that is, thruſting an Iron Stake through the Body out under the Neck or at the Mouth; in which extreme Torment the miſerable Wretch may live two or three Days, if the Guts or the Heart happen not to be wounded by the pointed Spike in its Paſſage. This Puniſhment ſeems to have been in uſe among the *Romans*, *Seneca*'s Epiſt. 14. *Cogita hoc loco carcerem, & cruces, & eculeos, & uncum, & adactum per medium hominem, qui per os emergat, ſtipitem:* and ſo in his Book *De Conſolatione ad Marciam cap.* 20. *Alii capite converſos in terram ſuſpendere: Alii per obſcœna ſtipitem egerunt: Alii brachia patibulo explicuerunt.* Murder is ſeldom Pardon'd, and eſpecially if the Relations of the Murder'd Perſon demand Juſtice.

The Circumciſion, tho' it be a Sacred Right, is perform'd in their private Houſes, and never in the Moſchs.

The Women colour their Eye-Brows and Lids with an ugly black Powder, I ſuppoſe, to ſet off their Beauty by ſuch a Shadow; and their Nails with the Powder of *Kanna*, which gives them a Tincture of faint Red, like Brick as they do the Tails and Hoofs of Horſes) which they look upon as a great Ornament. Their great diverſion is Bathing; ſometimes thrice, if not four times a Week. They do not permit them to go to Church in time of Prayer, for fear they ſhould ſpoil their Devotion: The *Turks* being of ſo brutiſh a Temper, that their Luſt is rais'd upon the Sight of a fair Object. They are call'd oftentimes by the Names of Flowers and Fruits, and ſometimes Phantaſtick Names are given them, ſuch as *Sucar Birpara*, or bit of Sugar, *Dil Ferib*, or Raviſher of Hearts, and the like.

Their Skill in Agriculture is very mean. In their Gardens they have ſeveral little Trenches to convey Water, where it may be moſt neceſſary for their Plants and Flowers. They know little or nothing of manuring their Grounds: Sometimes they burn their Fields and Vineyards after Harveſt and Vintage, partly to deſtroy the Vermin, and partly to enrich the Soil. They tread out their Corn with Oxen, drawing a ſquare Plank Board, about a Foot and a half or two Foot over, ſtudded with Flints, and winnow it upon their threſhing Floors in the open Air, the Wind blowing away the Chaff. They feed

feed their Horſes with Barley and chopt Straw; for I do not remember ever to have ſeen any Oats among them; and they make but little Hay.

For Draught of great Weight in their Carts they make uſe of Buffalo's.

Camels will endure Travel four Days together without Water, and will eat tops of Thiſtles, Shrubs, or any kind of Boughs: They are very ſure-footed, and kneel when they are a loading, and live to a conſiderable number of Years, ſome even to ſixty.

The chief Furniture of their Houſes are Carpets or Mats of *Grand Cairo*, neatly wrought with Straw, ſpread upon the Ground; they having no occaſion of Chairs, Couches, Stools, or Tables; their poſtures within Doors, being different from ours. They have no Hangings, but their Walls are whited and ſet off with Painting, only adorn'd with a kind of Porcelane; no Beds with Curtains.

They ſeal not with Wax, but Ink, at the Bottom of the Paper the Emperor's Name being uſually written with Flouriſhes and in perplext Characters: Nor have they any Coats of Arms upon their Seals, there being no ſuch thing as Gentility among them.

Some of them, notwithſtanding their Zeal for *Mahomet* and the Religion by him eſtabliſh'd, retain not only a favourable and honourable Opinion of our Bleſſed *Saviour*, but even place ſome kind of Confidence in the uſage of his Name, or of the Words of the Goſpel, tho' it may ſeem to be wholly in the way of Superſtition. Thus in their Amu-

lets, which they call *Chaimaili*, being little bits of Paper of two or three Fingers breadth, roul'd up in pieces of Silk, containing ſeveral ſhort Prayers or Sentences out of the *Alcoran*, with ſeveral Circles with other Figures, they uſually inſcribe the Holy and Venerable Name of *JESUS*, or the Figure of the Croſs, or the firſt Words of St. *John*'s Goſpel, and the like; they hang them about their Necks, or place them under their Arm-pits, or in their Boſom near their Hearts (being the ſame with what the *Greeks* call ἐγκόλπια) and eſpecially when they go to War, as a preſervative againſt the Dangers of it; and indeed againſt any misfortune whatſoever. Some have them ſow'd within their Caps: And I heard of a *Turk* who was ſo ſuperſtitious herein, that he always pluck'd it off, and was uncover'd when he had occaſion to make Water. Some are ſuch Bigots in their Religion, and ſo furious againſt the Chriſtians, that not only they treat them with all imaginable Scorn and Contempt, but take it ill to be ſalam'd or ſaluted by them, as if it were the effect of Sawcineſs or unbecoming Familiarity. Their Malice againſt the Chriſtians makes them envy the rich Furs they line their Veſts with, and it is a trouble to theſe hypocritical Zealots to ſee the *Franks* ride upon their fine *Arabian* Horſes.

The reſpect which they ſhew the *Alcoran* is wonderful: They dare not open the Leaves of it with unwaſhen Hands, according to the Advice or Command written in *Arabick* upon the Cover, *Let no one touch this Book, but he that is clean.* They kiſs it, and bend their Heads

Heads and touch their Eyes with it, both when they open it and ſhut it.

The *Janizaries*, when they attend upon *Chriſtian Ambaſſadors* to their Audience, ſeem to appear in their Bravery, and in a Habit far from that of a Soldier, being without either Fire-Arms or Swords, (which latter are not worn but in time of Service, or when they are upon a March, or embodied, wearing a Cap made of Camel's Hair, with a broad Flap dangling behind, a gilt embroider'd Wreath running round it, and an oblong piece of Braſs riſing up from the middle of their Forehead near a Foot, with a great Club in their Hand, like inferior Officers of the Civil Government. But when they are in the Camp, they throw off their upper Veſt, and Turbants, which they wear at all other uſual times, as troubleſome, and put on a *Feſs*, or red Cap, which ſits cloſe to their Head, and tuck up their *Duliman* or long Coat, to their Girdle, that they may be the more quick and expedite in their Charge.

They affect finery and neatneſs in their Clothes and Saſhes; not ſo much as a ſpot to be ſeen upon them, and in rainy or ſuſpicious Weather, are very careful how they go abroad without their *Tamurlicks*, which is a kind of Coat they throw over their Heads at ſuch times.

Their Pans and Diſhes are for the moſt part of Copper, but ſo handſomly Tinn'd over, that they look like Silver.

There are thouſands of Gypſies or *Zinganies* in *Turky*, who live the ſame idle naſty kind

kind of Life, as they do in *Chriſtendom*, and pretend to the ſame Art of telling Fortunes; and are look'd upon as the off-ſcouring of Mankind. It is accounted the extremeſt point of human Miſery to be a Slave to any of this ſort of Cattel.

The *Haggi*, or Pilgrims, that have been at *Mecca* and *Medina*, forbear to drink Wine moſt Religiouſly, out of a Perſuaſion, that one drop would efface all the Merits of that troubleſome and expenſive Journey; and ſome have been poſſeſs'd with ſuch a mad Zeal, that they have blinded themſelves after their having been bleſs'd with the Sight of *Mahomet*'s Sepulcher.

After *Jatzih*, that is an Hour and a half in the Night, throughout the whole Year, there is as great a Silence in the Streets as at Midnight: The Emperor *Achmet* in the Year 1611. having made an Order, that no one ſhould preſume to be out of his Houſe after that time; which is to this Day moſt punctually obſerved. The *Boſtangi baſhi*, who has the Command of all the *Agiamoglans* in the *Seraglio*, the *Topgibaſhi*, or ſuch great Officers attended with a great Train of armed Men, walking the Rounds, and drubbing ſuch as they find abroad at unſeaſonable Hours of what Nation or Quality ſoever, except Phyſicians, Chirurgions, and Apothecaries, whom they allow at all times to viſit the Sick.

The *Turkmans*, (for ſo they are peculiarly called, as if they were the true Deſcendants of the *Old Turks* or *Scythians*, whoſe wandering kind of Life is deſcribed by the Poet;

Ἄμα-

Ἀμαξόβιοι { *Nulla domus, plauſtris habitant, migrare per arva*
Mos, atq; errantes circumvectare penates.)

have no fixt Reſidence any where, but travel with their Families and Cattle from Place to Place, carrying their Wives and Children upon Camels; they pitch their Tents uſually near Rivers and Fountains, for the convenience of Water, and according as their Neceſſities require, make a longer or a ſhorter Stay. Their whole Eſtate conſiſts in their numerous Flocks and Herds, which they ſell upon occaſion to ſupply themſelves with what they want, at the Towns they paſs by. Their only concern is how to enjoy the Benefits and Bleſſings of Nature, without the troubles and turmoils and diſquiets of Life; being contented and happy in one another's Company, void of all Ambition and Envy, Courteous and Humane to Strangers, that may want their Help and Aſſiſtance, kindly entertaining them with ſuch Proviſion as their Folds afford. I have met with ſome Companies of theſe harmleſs Wanderers in my Travels. The Country lies open without any Incloſures, and the Propriety not being veſted in any one, they Travel thro' the Plains unmoleſted, and find excellent Paſturage every where. The *Turks* till no more Ground than will ſerve their Neceſſities: Being ſupplied with Corn from *Ægypt*, and from *Moldavia* and *Walachia*, by the way of the *Black Sea*, letting vaſt Tracts of Ground lie waſte and

and uncultivated; ſo that their Sloth herein ſometimes is juſtly puniſhed with Dearths.

They have nothing to ſhew for their Houſes and Poſſeſſion, but an *Hogiet* or piece of Paper ſubſcribed by the *Cadi*, if they have acquired them by their Mony, or that they were their Fathers before them.

The *Derviſes* generally are Melancholy, and place the greateſt part of their Religion in Abſtinence and other Severities. Some cut their Fleſh, others vow not to ſpeak for ſix or ſeven Years, or all their Lives long, tho' never ſo much provoked or diſtreſſed. Their Garments are made of a courſe ſort of Wool or Goat's Hair: They are tied up by the Vow of their Order ever from Marrying. Several of this Sect in the height of their Religious Phrenzy have attempted upon the Lives of the Emperors themſelves, (at whoſe Government they have taken diſguſt) as *Mahomet* the ſecond, and *Achmet*, as if ſuch deſperate Attempts were fatal to Bigots in all Religions.

They pay a mighty Veneration to any Relique of *Mahomet*, his Banner is ſtill preſerved in the Treaſury of the *Seraglio*, and is look'd upon as the great Security of the Empire. They believe that it was ſent from Heaven, and conveyed into the Hands of *Mahomet*, by the Angel *Gabriel*, as a Pledge and Sign of Succeſs and Victory in his Battels againſt the *Chriſtians*, and all other Enemies of the *Muſulman*-Faith. It was ſent to *Candia* to encourage the Soldiers to endure the fatigue of that long and tedious Siege; and when it was brought thence after the

Sur-

Surrendry of that City, to be depoſited in its uſual Place, the *Vizir* gave ſeveral *Chriſtian* Slaves, that row'd in the Gally that was fraught with this Holy Ware, their Liberty. They pretend to have ſome Rags of *Mahomet*'s Veſt, to which they aſcribe great Virtue. In confidence of which, the Emperor *Achmet*, in the time of a great Fire which raged at *Conſtantinople*, when all other means fail'd, dipt part of them in Water to be ſprinkled upon the Fire to rebate the Fury of it.

Next to the *Mufti* or *Cadaleskires* are the *Mollas*, of which theſe four are the chiefeſt in Dignity. The Molla of *Galata*, *Adrianople*, *Aleppo*, *Pruſa*; and after them are reckoned theſe eight, *Stambol Ephendi*, *Lariſſa*, *Miſir* or *Cairo*, *Sham* or *Damaſcus*, *Diarbekir* or *Meſopotamia*, *Cutaia*, *Sophia*, *Philippi*.

The Prieſts have no Habit peculiar to their Profeſſion, whereby they are diſtinguiſh'd from others. If they are put from their Moſchs for miſcarriage or neglect of doing their Duty, or if they think fit to reſign and be Prieſts no longer, they may betake themſelves without any Scandal to ſecular Employments, their former Character and Quality wholly ceaſing. While they remain Prieſts, they counterfeit a more than ordinary Gravity in their Diſcourſe and Walking: and affect to wear Turbants ſwelling out, and made up with more croſs folds: which was all the difference which I could obſerve by their Head Attire, which is various, tho' I could not find that this was conſtantly and ſtrictly obſerved.

In

In *Byram* time, which is the great Feſtival of the Year, at which time every one looks cheerfully and merrily, among other ſigns of mutual Reſpect, they beſprinkle one another with ſweet Water. They indulge to ſeveral Sports: and ſome are mightily pleaſed with ſwinging in the open Air, the ordinary ſort of People eſpecially, paying only a few Aſpers for the diverſion.

The Government is perfectly Arbitrary and Deſpotical; the Will and Pleaſure of the Emperor having the Force and Power of a Law, and oftentimes is above it. His bare Command without any Proceſs is enough to take off the Head of any Perſon, (tho' never ſo Eminent in Dignity, tho' uſually for Formality and to ſilence the Murmurings of the Soldiery and People, the Sentence is confirm'd by the *Mufti*) ſometimes *Baſſa's*, who have amaſſed great Treaſures in their Governments, are cut off in their own Houſes in the midſt of their Retinue, the Meſſengers of Death producing the Imperial Command, uſually ſent in a black Purſe, and not a Sword drawn in their Defence. Others, if they are obnoxious to the leaſt Umbrage or Jealouſy, tho' diſmiſt the *Seraglio* with all poſſible Demonſtrations of the Grand *Signior*'s Favour, and with rich Preſents in order to take poſſeſſion of Places of great Command in the Empire, before they have got two or three Days Journey from *Conſtantinople*, have been overtaken and ſtrangled. In the Army Commands are given according to Merit, Courage and Conduct are ſure to be rewarded, the Way lying open to the meaneſt Soldier

dier to raiſe himſelf to be the Chief of his Order. But other Preferments depend upon meer Chance, and upon the Fancy of the Emperor, whether the Perſon be fit or no, and they are as ſoon loſt. The leaſt ill Succeſs or Miſcarriage proves oftentimes fatal, and a more lucky Man is put in his Place, and he ſucceeded by a Third, if unfortunate in a Deſign, tho' managed with never ſo much Prudence and Valour. They admit of no hereditary Honours, and have no reſpect to Deſcent or Blood, except the *Ottoman* Family: He only is Great and Noble, whom the Emperor favours, and while his Command laſts. According to a Tradition, that paſſes current among them, a Baſſa's Son by a *Sultana*, or a Daughter, or a Siſter of the Emperor can riſe no higher than to be a *Sangiachei*, or Governor of ſome little Province, much inferior to a Baſſa and under his Juriſdiction. Being born of Slaves for the moſt Part, they do not pride themſelves in their Birth, very few among them being ſcarce able to give any Account of their Grandfathers. They have no Sirnames, but are diſtinguiſh'd by their Poſſeſſions and Places of Abode, and enjoying by Law a Liberty of having what Women they pleaſe, they have little or no regard to Alliance or Kindred.

Their Empire owes the Continuance of its Being to the Severity of the Government, which oftentimes takes Place without regard either to Juſtice or Equity, and to their frequent Wars, which prevent all Occaſions of Mutiny and Faction among the Soldiers, which happen frequently when unimploy'd.

So

So that tho' Ambition may put a warlike Sultan upon enlarging his Territories by new Conqueſts, yet reaſon of State forces a weak and effeminate Prince, ſuch as was *Ibrahim*, to make War for his own Security. Their Politicks are not owing to Books and Study and the Examples of paſt times, but to Experience and the plain Suggeſtions of Nature and common Senſe: They have Rules of Government, which they firmly adhere to, holding the Reins ſtrait, eſpecially being cruel and inexorable to Criminals of State, who never are to expect any Mercy or Pity. Their Councils formerly were open, and their Deſigns known, and proclaimed before Hand, as if this had been a Bravery becoming their Greatneſs, and that they ſcorned to ſteal a Conqueſt. But they have learned ſince the Art of diſſimulation, and can Lie and Swear for their Intereſt, and ſeem exceſſive in their Careſſes to the Miniſters of thoſe Countries, which they intend to Invade. But their preparations for Arming are made with ſo much Noiſe, that an ordinary Jealouſie is ſoon awakened by it to oppoſe them, in caſe of an Attack. They ſeldom or never care to have War at both Extremes of the Empire at the ſame time, and therefore they are mighty ſollicitous to ſecure a Peace with *Chriſtendom*, when they intend a War upon the *Perſians*: And as much as is poſſible, they avoid quarrelling with two Chriſtian Princes at once, being uſually at League either with *Poland* and *Muſcovy*, when they War upon *Hungary*, and ſo on the contrary; dreading nothing more than an Union of the

Chri-

Chriſtian Princes, bordering upon them, which would prove ſo fatal to their Empire, and quickly put a Period to their Greatneſs. For hereby they would be put upon a neceſſity of making a defenſive War to their great Loſs and Diſadvantage, and at laſt either be forced to beg a Peace of the *Chriſtians*, or run the hazard of loſing all, by a further Proſecution of War.

This they are very ſenſible of, and therefore as they take all occaſion to promote Quarrels and Diſſentions in *Hungary* and *Tranſylvania*, ſo they greatly rejoyce, when the Princes of *Chriſtendom* are at War one with another. This is their great time of Advantage, and they know that it is their true Intereſt to purſue it, tho' they do not always, by reaſon of the ill condition of their own Affairs, make uſe of it. During the Civil Wars of *Germany*, the Baſſa's and other Commanders of the Army were very importunate with the grand Signior, to make a War on that ſide, and to enlarge his Conqueſts as far as *Vienna*, no conjuncture having been ever ſo favourable to conſummate ſuch a Deſign, in which *Solyman* ſo unhappily miſcarried. They promiſed him an eaſie Victory, aſſuring him that the Animoſities of the Princes of the Empire were ſo heightned, that there was no room left for a Reconciliation, that he was but to go in the Head of an Army to take Poſſeſſion, and that *Auſtria* would Surrender at the firſt News of his March towards it. The Emperor was not to be moved at that time by theſe Inſinuations and plauſible Diſcourſes; being con-

tinually urged, He as often denied, one Day when they came to renew their Advice about the *German* Way, He having given Order before, that ſeveral Dogs ſhould be kept for ſome Days without Meat, commanded that they ſhould be brought out, being almoſt ſtarved, and Meat thrown among them, whereupon they ſnarled and bit one another: In the midſt of their Noiſe and Fighting, he cauſed a Bear to be let looſe in the ſame Area; the Dogs forgetting their Meat, and leaving off their Fighting, ran all upon the Bear, ready to Prey upon them ſingly, and at laſt killed him. This Diverſion the Emperor gave his Baſſa's, and left them to make the Application.

A certain Prophecy of no ſmall Authority runs in the Minds of all the People, and has gain'd great Credit and Belief among them, that their Empire ſhall be ruined by a Northern Nation, which has white and yellowiſh Hair. The Interpretation is as various as their Fancy. Some fix this Character on the *Muſcovites:* And the poor *Greeks* flatter themſelves with fooliſh Hopes, that they are to be their Deliverers, and to reſcue them from their Slavery, chiefly becauſe they are of their Communion, and owe their Converſion to the *Chriſtian* Faith to the Piety and Zeal of the *Grecian* Biſhops formerly. Others look upon the *Swedes*, as the Perſons deſcrib'd in the Prophecy, whom they are moſt to fear. The Ground and Original of this Fancy I ſuppoſe is owing to the great Opinion, which they have of the Valour and Courage of that Warlike Nation. The great Victories of the

Swedes

Swedes in *Germany* under *Guſtavus Adolphus* were loudly proclaimed at *Conſtantinople*, as if there were no withſtanding the Shock and Fury of their Arms: And their continued Succeſſes confirmed the *Turks* in their firſt Belief, and their Fears and Jealouſies were augmented afterwards, when *Charles Guſtave*, a Prince of as heroick a Courage, and as great Abilities in the Art and Management of War as the juſtly admired *Guſtavus*, entred *Poland* with his Army, and carried all before him, ſeized upon *Warſaw* and drove *Caſimire* out of his Kingdom, and had almoſt made an entire and abſolute Conqueſt, only a few Places holding out. This alarmed the Grand Signior and the Baſſa's of the *Port*, as if the Prophecy were then about to be fulfilled, who did not care for the Company of ſuch troubleſome Neighbours, who might puſh on their Victories, and joyning with the *Coſſacks*, advance their Arms further, and make their Country the Seat of a War, which might draw after it fatal Conſequences. To prevent which, Couriers are diſpatch'd from *Conſtantinople* to *Ragotski*, Prince of *Tranſylvania*, then in concert with the *Swedes*, to Command him to retire with his Army out of *Poland*, as he valued the Peace and Safety of his own Country, and the Friendſhip of the Grand Signior, whoſe Tributary he was, and by whoſe Favour he had gain'd that Principality: And the *Crim-Tartars*, the Sworn Enemies of the *Poles*, who at that time lay heavy upon them, were wrought upon by the ſame Motives and Reaſons of State, to clap up a Peace with them, that being freed from theſe Diſtractions, they

might unite their Forces the better together, and make Head againſt the *Swedes*.

The Ambaſſadors of *Chriſtian* Princes, when they are admitted by the Grand Signior to an Audience, (their Preſents being then of courſe made, which are look'd upon as due, not to ſay, as an Homage) are diſmiſs'd in few Words, and referred by him to his *Wakil* or Deputy, as he uſually ſtiles the chief *Vizir*: And a ſmall Number of their Retinue only permitted the Honour of kiſſing his Veſt, and then rudely enough ſent away.

The Grand Signiors keep up the State of the old *Aſiatick* Princes: they do not expoſe themſelves often to the View of the People, unleſs when they ride in Triumph, or upon ſome ſuch ſolemn Occaſion; when they go to the Moſchs, or divert themſelves in the Fields, either in Riding or Hunting, they do not love to be ſtared upon, or approached. It is highly Criminal to pry into their Sports, ſuch an Inſolent Curioſity being often puniſhed with Death. The Story is Famous of *Morad* the Third, who baiting a Bear in the old Palace with a Maſtiff, and eſpying three Fellows upon the Tower of *Bajazid*'s Moſch, who had planted themſelves to ſee the Sport, commanded their Heads to be ſtruck off immediately, and be brought before him, which was done accordingly. Inſtances of ſuch Capricio's are frequent in the *Turkiſh* Hiſtory; this following happened during my Stay at *Conſtantinople*.

Upon the return of Vizir *Achmet* from *Candia*, after the Surrendry of that City, and a happy end put by him to that tedious and

and bloody War, he acquainting the preſent Emperor, then at *Adrianople*, with the Hiſtory of that famous Siege at large, made ſuch terrible Repreſentations of their and the *Venetians* Mining and Countermining one another, that the Emperor was reſolved out of Curioſity to ſee the Experiment made of a thing, that ſeemed to him almoſt incredible. A Work was ſoon raiſed and undermined, and above 30 Murderers and Robbers upon the High-Way and ſuch like Villains were put into it, as it were to defend it. The Grand Signior ſtood upon an Eminence at ſome conſiderable Diſtance, expecting the Iſſue of it; upon a Signal given, the Mine was ſprung, and the Fort demoliſhed, and the poor Wretches torn piecemeal to his great Satisfaction and Amazement.

The Moon is the auſpicious Planet of the *Turks:* According to the Courſe of which they celebrate their Feſtivals. They begin their Months from the firſt Appearance of it, at which time they chooſe, except a Delay brings a great Prejudice and Inconvenience with it, to begin their great Actions. The Creſcent is the Enſign of the Empire, which they Paint in Banners, and place upon the Spires of their Moſchs. Next to the Day of the appearing Moon, they pitch upon *Friday*, to Fight upon, to begin a Journey, and eſpecially their Pilgrimage toward *Mecca*, or do any thing of great Conſequence, as very lucky and fortunate.

A Relation of a Voyage from *Aleppo* to *Palmyra* in *Syria*; ſent by the Reverend Mr. *William Halliſax* to Dr. *Edward Bernard* (late) *Savilian* Profeſſor of Aſtronomy in *Oxford*, and by him communicated to Dr. *Thomas Smith. Reg. Soc. S.*

D. Thomæ Smitho Edoardus Bernardus, S.

QUanquam Epiſtolas tuas, O cor & medulla amicitiæ noſtræ, & alia munera grato animo in ſinum hunc recipere ſoleo; eas tamen Notitias, *quas tuo dono hodie accepi, tanquam germana & famæ nunquam marceſcentis pignora, multo chariores habeo, &, dum vivam, reverenter adſervabo. Sic enim Aſianarum Eccleſiarum Pleiada e tenebris denuo excitas; ſic antiquiſſimorum Epiſcoporum ſedes inſtauras, ut candelabrum* ἐπλάλοφον *cum magno Theologo & Apocalypta iterum ardens ac fulgens videre mihi videor. Præterea, in deſcriptione urbis Conſtantini Silentiarios, Codinos, Gyllios, cæteros exſuperas. Fruere diu ſuperſtes hac laude, quam ſuam eſſe maluit Sponius, & præter morem ingenuum aut fas ſibi abripere.*

4 *Gaudeo*

Gaudeo tamen mihi jam novum adesse munus, quod tecum queam impertire volente spero, & læto. Id est Epigrapharum Sylloge, quas a columnis Palmyrenis *Charissimus amicus,* Gulielmus Halifaxius *pulchro studio descripsit. Utinam* Syriaca *plura ipse addidisset sub Græcis, & Epocham* Palmyrenam *a* Seleuco *victore, non ab* Alexandri *magni obitu incepisset. Historiæ vero* Augustæ *scriptores qui teruntur, &* Herodianus *Grammaticus pleraque Inscriptionum istarum multum illustrant. Verum isthæc vix sunt nostri otii. Attamen si hæc commiseris* Philosophicarum Transactionum, *ut nunc loquuntur, conditoribus haud injucundum πρόπομα fuerit, donec vir illustris & adprime doctus* D. Cuperus *uberiora forte ediderit de urbe* Solomonis *ejusque reliquiis. Vale vir venerabilis.*

Oxoniæ *Nonis* Octobribus
A. D. CIↃIↃCXCV.

Reverend Sir,

HAving promised you an Account of my Voyage to *Tadmor*, I cannot now excuse my self from being as good as my Word, whatever Censure I may incur of having misspent my Money and Time in search of such unprofitable Curiosities; or what I more fear, of having made such poor Improvements, of which a Man of larger Reading and Understanding, might have afforded much greater Information. We departed from *Aleppo* on *Michaelmas-day*, 1691. and in six easy Days Travel over a desart Country, came to *Tad-*

mor; Journeying almoſt continually to the South, with very little variation to the Eaſtward. As we rode into the Town, we took notice of a Caſtle about half an Hour's Diſtance from it, and ſo ſituated as to Command both the Paſs into the Hills, by which we entred, and the City too. But we could eaſily perceive it was no Old Building, retaining no Footſteps of the exquiſite Workmanſhip and Ingenuity of the Ancients. Upon Enquiry we were informed, that it was built by *Man-Ogle*, a Prince of the *Druces*, in the Reign of *Amurath* the Third, *Anno Dom.* 1585. But I know not how to give much Credit to this Story, becauſe I find not that either *Man-Ogle*, or any *Drucian* Prince, was ever Powerful in theſe Parts, their Strength lying on Mount *Libanus*, and along the Coaſt of *Sydon*, *Berytus*, *&c.* 'Tis a Work of more Labour than Art, and the very Situation alone is enough to render it almoſt Impregnable; ſtanding on the top of a very high Hill, encloſed with a deep Ditch, cut out of the very Rock, over which there was only one ſole Paſſage by a Draw-Bridge: This Bridge too is now broken down; ſo that there is no Entrance remaining, unleſs you will be at the Pains to clamber up the Rock, which is in one place feaſible, but withal ſo difficult and hazardous, that a ſmall Slip may endanger ones Life. Nor is there any thing within to be ſeen ſufficient to recompence your Trouble of getting up to it, the Building being confuſed, and the Rooms very ill contrived. Upon the top of the Hill there is a Well

Tadmor Caſtle.

of

of a prodigious Depth, as certainly it muſt be a great Way to come at Water from the top of ſuch a Rock, the Ditch that ſurrounds it, not having the leaſt appearance of Moiſture therein; which made it therefore ſeem more ſtrange that a wild Boar ſhould ruſh out thence among our Horſes, when we rode up to take a more particular View of the Place. This Caſtle ſtands on the North Side of the Town, and from hence you have the beſt Proſpect of the Country all about. You ſee *Tadmor* under you incloſed on three Sides with long Ridges of Mountains, which open towards the Eaſt gradually to the Diſtance of about an Hour's Riding; but to the South ſtretches a vaſt Plain beyond the Reach of the Eye. In this Plain you ſee a large Valley of Salt affording great Quantities thereof, and lying near about an Hour's Diſtance from the City. And this more probably is the Valley of Salt, mentioned, 2 *Sam.* viii. 13. where *David* ſmote the *Syrians*, and ſlew 18000 Men, than another which lies but four Hours from *Aleppo*, and has ſometimes paſt for it. The Air is good, but the Soil exceeding barren, nothing green to be ſeen therein, ſave ſome few Palm-Trees in the Gardens, and here and there about the Town. And from theſe Trees I conceive is obtained its Name both in Hebrew (*Tadmor*) which ſignifies a Palm-Tree, and in Latin (*Palmira*;) and the whole Country is thence denominated *Syria Palmirena*; and ſometimes *Solitudines Palmirenæ*: So that the *Latins* did not change, but only tranſlate the old Name, which there-

The Valley of Salt.

therefore ſtill obtains in theſe Eaſtern Parts, and the more Modern is wholly unknown.

Tadmor. The City itſelf appears to have been of a large Extent, by the Space now taken up by the Ruins; but there are no Footſteps of any Walls remaining, nor is it poſſible to judge of the ancient Figure of the Place. The preſent Inhabitants, as they are a poor, miſerable, dirty People, ſo they have ſhut themſelves up, to the Number of about Thirty or Forty Families, in little Huts made of Dirt, within the Walls of a ſpacious Court, which encloſed a moſt magnificent Heathen Temple. Hereinto alſo we entred, the whole Power of the Village, if I may ſo call it, being gathered together at the Door, whether to ſtand upon their Defence, in caſe we proved Enemies, (for ſome of them had their Guns in their Hands) or out of meer Curioſity to gaze upon us, I know not. However our Guide, who was an *Arab*, whom *Aſſyne* [a] their preſent King had ſent to Conduct us through the whole Voyage, being a Man known among them, we had an eaſy Admittance, and with a great many Welcomes in their Language were led to the *Sheck*'s Houſe, with whom we were to make our Abode. And to mention here what the Place

[a] This *Aſſyne* was in the Year of our Lord 1693. Depoſed by the *Turks*, and one *Dar* advanced to fill his Place; ſo that now he is conſtrained to live upon Rapine, being followed by a conſiderable Number of Men, who delight not to Labour, nor to live under any ſettled Government,

at

at firſt View repreſents: Certainly the World itſelf cannot afford the like mixture of Remains of the greateſt State and Magnificence, together with the Extremity of Filth and Poverty. The neareſt Parallel I can think of, is that of the Temple of *Baal*, deſtroyed by *Jehu*, and converted into a Draught-Houſe, 2 *Kings* x. 27. And if, what is not improbable, this very Place was a Temple of *Jupiter Belus*, the Similitude will run upon all Four.

Being thus lodged within the Place, I ſhall begin with a Deſcription thereof, and proceed to what I obſerved remarkable without. The whole incloſed Space is a Square of 200 Yards each ſide, encompaſs'd with a high and ſtately Wall, built of large ſquare Stone, and adorned with Pilaſters within and without, to the number, (as near as we could compute by what is ſtanding of the Wall, which is much the greater part) of 62 on a ſide. And had not the Barbarity of the *Turks*, Enemies to every thing that is ſplendid and noble, out of a vain Superſtition, purpoſely beat down thoſe beautiful Corniſhes both here and in other Places, we had ſeen the moſt curious and exquiſite Carvings in Stone which perhaps the World could ever boaſt of; as here and there a ſmall Remainder, which has eſcap'd their Fury, does abundantly evidence. The Weſt ſide, wherein is the Entrance, is moſt of it broken down, and near the middle of the Square, another higher Wall erected out of the Ruins; which ſhews to have been a Caſtle, ſtrong but rude; the old Stones and many Pillars broken or

The Temple

ſawn

ſawn aſunder, being rolled into the Fabrick, and ill cemented. Within were to be ſeen the Foundations of another Wall, which probably might anſwer this Front, and that the *Mamalukes*, whoſe Workmanſhip it ſeems moſt likely to have been, built the Caſtle here for the Security of the Place. Before the whole length of this new Front, except a narrow Paſſage which is left for an Entrance, is cut a deep Ditch, the aſcent whereof on the inner ſide is fac'd with Stone to the very Foot of the Wall, which muſt have render'd it very difficult to have aſſaulted it. The Paſſage to, and the Door it ſelf is very narrow, not wider than to receive a loaded Camel, or that two Footmen may well walk a-breaſt. And as ſoon as you are within the firſt Door, you make a ſhort turn to the Right, and paſs on to another of the like bigneſs, which leads into the Court. But all this is but a new Building upon an old, and by this outward Wall is quite ſhrouded that Magnificent Entrance, which belonged to the firſt Fabrick; of the ſtatelineſs whereof we were enabled to judge by the two Stones which ſupported the ſides of the great Gate, each of which is 35 Foot in length, and artificially carved with Vines and cluſters of Grapes, exceeding bold and to the Life. They are both ſtanding, and in their Places, and the diſtance between them, which gives us the wideneſs of the Gate 15 Foot. But all this is now walled up to the narrow Door before mentioned. Over the little Door there is an Inſcription in *Greek*, and alſo another in another Language and Character, which I never

ſay till in *Tadmor*, nor underſtand what to make of it. From that in *Greek* we hoped for ſome Information; but it will be evident to any one that reads it, that the Stone was brought from another Place and caſually put in there. 'Tis thus:

ΤΟ ΜΝΗΜΕΙΟΝ ΤΟΥ ΤΑΦΕΩΝΟC ΕΚΤΙCΕΝ ΕΞ ΙΔΙΩΝ CΕΠΤΙΜΙΟC ΟΔΑΙΝΑΘΟC Ο ΛΑΜΠΡΟΤΑΤΟC CΥΝΚΛΗΤ [ΙΚΟC] ΑΙΡΑΝΟΥ ΟΥ ΑΒΑΛΛΑΘΟΥ ΤΟΥ ΝΑCΩΡΟΥΑΥ ΤΩΥΤΕ ΚΑΙ ΥΙΟΙC ΑΥΤΟΥ ΚΑΙ ΥΙΩΝΟΙC ΕΙC ΤΟ ΠΑΝΤΕΛΕC ΑΙΩΝΙΟΝ ΤΕΙΜΗΝ.

Under this was the unknown characters, which I ſhall here give you a Specimen of, it being as well as it could be taken, thus. *Vide Figuram.*

The Letters between theſe [ ] Marks were not Legible, but I have ventured to ſupply the defect, as alſo you will ſee in ſome others following. Neither was the Ε in ΜΝΗΜΕΙΟΝ upon the Stone, but was doubtleſs omitted by miſtake; and the Inſcription is nothing elſe but the Inſcription of a Sepulchre, the like to which we ſaw ſeveral, as I ſhall have occaſion to mention ſome of them hereafter. And as for the other Character, it being added almoſt under every *Greek* Inſcription we ſaw, and rarely found alone, I am apt to believe it the Native Language and Character of the Place, and the Matter it contains nothing elſe but what we have in the *Greek*.

As ſoon as you are entred within the Court, you ſee the Remainders of two Rows of very Noble Marble Pillars 37 Foot high, with their

their Capitals of moſt exquiſite Carved Work; as alſo muſt have been the Corniſhes between them, before by Rude and Superſtitious Hands they were broken down. Of theſe there are now no more than 58 remaining entire; but there muſt have been a great many more, for they appear to have gone quite round the whole Court, and to have ſupported a moſt ſpacious double Piazza or Cloyſter. Of this Piazza the Walks on the Weſt ſide, which is oppoſed to the Front of the Temple, ſeem to have exceeded the other in Beauty and Spaciouſneſs; and at each end thereof are two Niches for Statues at their full length, with their Pedeſtals, Borders, Supporters, and Canopies, carved with the greateſt Artifice and Curioſity. The Space within this once Beautiful Encloſure, which is now filled with nothing but the dirty Huts of the Inhabitants, I conceive to have been an open Court, in the midſt whereof ſtands the Temple, encompaſs'd with another row of Pillars of a different Order, and much higher than the former, being above 50 Foot high. Of theſe remain now but 16, but there muſt have been about double that Number, which whether they encloſed an inner Court, or ſupported the Roof of a Cloyſter, there being nothing now of a Roof remaining, is uncertain. Only one great Stone lies down, which ſeems to have reach'd from theſe Pillars to the Walls of the Temple. The whole Space contained within theſe Pillars we found to be 59 Yards in Length, and in Breadth near 28. In the midſt of which Space is the Temple, extending in Length

Length more than 33 Yards, and in Breadth 13 or 14. It points North and South, having a moſt Magnificent Entrance on the Weſt, exactly in the middle of the Building, which by the ſmall Remains yet to be ſeen, ſeems to have been one of the moſt glorious Structures in the World. I never ſaw Vines and cluſters of Grapes cut in Stone, ſo Bold, ſo Lively, and ſo Natural, in any Place: And we had doubtleſs ſeen things abundantly more curious, if they had not been maliciouſly broken to pieces. Juſt over the Door we could make a ſhift to diſcern part of the Wings of a large Spread-Eagle, extending the whole wideneſs thereof. The largeneſs whereof led me at firſt to imagine it might have been rather a Cherub over-ſhadowing the Entrance, there being nothing of the Body remaining to guide ones Judgment, and ſome little Angels or *Cupids* appear ſtill in the corners of the ſame Stone. But afterwards ſeeing other Eagles upon Stones that were fallen down, I conclude this muſt have been one likewiſe, only of a much larger ſize. Of this Temple there is nothing at preſent but the outward Walls ſtanding, in which it is obſervable, that as the Windows were not large, ſo they were made narrower towards the top, than they were below; but all adorned with excellent Carvings. Within the Walls, the *Turks*, or more probably the *Mamalukes*, have built a Roof, which is ſupported by ſmall Pillars and Arches; but a great deal lower, as well as in all other reſpects diſproportionate and inferior to what the Ancient Covering muſt have

have been. And they have converted the place into a Moſque, having added to the South End thereof new Ornaments after their manner, with *Arabick* Inſcriptions and Sentences out of the *Alcoran*, wrote in Flouriſhes and Wreaths, not without Art. But at the North End of the Building, which is ſhut out of the Moſque, are Relicks of much greater Artifice and Beauty. Whether they were in the Nature of Canopies over ſome Altars placed there, or to what other uſe they ſerved, I am not able to conjecture. They are beautified with the moſt curious Fretwork and Carvings; in the midſt of which is a Dome or Cupola, above ſix Foot Diameter, which we found above to be of one piece; whether hewn out of a Rock entire, or made of ſome Artificial Cement or Compoſition, by Time hardened into a Lapideous Subſtance, ſeems doubtful; though I am rather inclined to believe the latter. It is in fine, a moſt exquiſite Piece of Workmanſhip, and on which I could have beſtowed more time to view it, than what was allowed us, haſtening to other Sights.

Having taken this Survey of the Temple, we went Abroad, where our Eyes were preſently accoſted with an amazing ſight of a multitude of Marble Pillars, ſtanding ſcattered up and down, for the ſpace of near a Mile of Ground, this way and that, but ſo diſpoſed as to afford no ſolid Foundation to judge, what ſort of Structures they formerly framed. I paſs by the Ruins of a Moſch, which directing our Courſe Northward, was the firſt thing occur'd to our View, after

A Moſch.

after we came out of the Court of the Temple, which though of a more Artificial Frame and Compoſure than many I have ſeen, yet is not worthy to ſtop us in the way to things both of greater Antiquity, and every way more noble and worthy our Conſideration. Having therefore paſt this, you have the Proſpect of ſuch Magnificent Ruins, that if it be lawful to frame a Conjecture of the Original Beauty of the Place, by what is ſtill remaining, I queſtion ſomewhat whether any City in the World could have challenged Precedence of this in its Glory. But it being impoſſible as they now ſtand to reduce them to any regular Method, I muſt be forced to give you a rude Account of them as they came in ſight; and which will fall much ſhort of the Greatneſs and Statelineſs which they ſhew to the Eye.

An Obelisk.

Advancing then towards the North, you have before you a very tall and ſtately Obelisk or Pillar, conſiſting of ſeven large Stones, beſides its Capital and a wreath'd Work above it; the Carvings here, as in all other Places, being extraordinary fine. The height of it is above 50 Foot, and upon it I conceive may have ſtood a Statue, which the *Turks*, zealous Enemies of all Imagery, have thrown down, and broken in pieces. 'Tis in compaſs, juſt above the Pedeſtal, 12 Foot and a half. On each Hand of this, towards the Eaſt and Weſt, you ſee two other large Pillars, each a quarter of a Mile diſtant from you, which ſeem to have ſome Correſpondence one to the other. And there is a piece of

of another ſtanding near that of the Eaſt, which would incline one to think there was once a continued row of them. The height of this to the Eaſt I took with my Quadrant, and conclude to be more than 42 Foot high, and the Circumference proportionable. Upon the Body thereof is the following Inſcription.

Η ΒΟΥΛΗ ΚΑΙ Ο ΔΗΜΟC ΛΑΙΛΑΜΕΝΑ
ΠΑΝΟΥ ΜΟΚΙΜΟΥ ΤΟΥ ΑΙΡΑΝΟΥ ΤΟΥ
ΜΑΘΘΑ ΚΑΙ ΑΙΡΑΝΗΝ ΤΟΝ ΠΑΤΕΡΑ
ΑΥΤΟΥ ΕΥCΕΒΕΙC ΚΑΙ ΦΙΛΟΠΑΤΡΙΔΑC Κ(ΑΙ)
ΠΑΝΤΙ ΤΡΟΠΩ (ΕΥ)CΕΙΜΩC ΑΡΕCΑΝΤΑC ΤΗ
ΠΑΤΡΙΔΙ ΚΑΙ ΠΑΤΡΙΟΙC ΘΕΟΙC ΤΕΙΜΗΣ
ΧΑΡΙΝ ΕΤΟΥC ΣΝΤ ΤΛ ΜΗΝΟC ΞΑΝΔΙΚΟΥ.

I perſuade my ſelf it would be but loſt Labour to ſpend time in making Reflections upon this or the following Inſcriptions; as for the Knowledge they may exhibit to the World, your own Conjectures will more happily lead you unto it, than any thing I am like to ſuggeſt. It ſeems however pretty evident they were a Free State, governed by a Senate and People, though perhaps under the Protection of great Empires, the *Parthians*, it is probable, firſt, and afterward the *Romans*, who for a long time contended for the Maſtery here in the Eaſt. And this Government might continue among them till about the time of *Aurelian*, who demoliſhed the Place, and led *Zenobia*, Wife of *Odenatus*, Captive to *Rome:* Who, though ſhe be called Queen, yet I find not that ever her Huſband had the Title of King; but was only

ly one of the chief Inhabitants, a leading Man in the Senate (as 'tis probable this *Alilamanes* and *Airanes* were before him) who while the *Romans* were buſied in *Europe*, made himſelf great here, and by his own Force repelled the *Parthians*; who having maſter'd whatever was held by the *Romans* on the other Side of *Euphrates*, made an Incurſion into *Syria*, but were by *Odænatus* driven back beyond the River. In the Courſe of theſe Wars *Odænatus* was ſlain, but his Wife *Zenobia*, being a Woman of a maſculine Spirit, not only kept her Ground againſt her Enemies Abroad, but maintained her Authority at Home, keeping the Government in her Hands. Afterwards out of a Deſire to caſt off the *Roman* Yoke, ſhe cauſed the whole Gariſon, which was left there by *Aurelian*, to be barbarouſly cut off: Which bringing *Aurelian* back with his Army, he quickly took the City, and deſtroyed it, putting the Inhabitants to the Sword, and carrying *Zenobia* Captive to *Rome*; which was the fatal Period of the Glory of the Place. This Cuſtom of theirs of running up their Genealogies or Pedigrees to the fourth and fifth Generation, ſhews them to have borrowed ſome of their Faſhions from their Neighbours the *Jews*, with whom it is not unlikely they had of old great Commerce; and perhaps many of them were deſcended from that People, *Zenobia* her ſelf being ſaid to have been a *Jeweſs*: Or elſe this muſt have been the Manner of all the Eaſtern Nations. Their *Æra* or Account of Time they begin from the Death of *Alexander* the *Great*, as the *Syrians* generally do;

the very Chriſtians at this Day following the ſame Uſage. Yet though they mark the Date of the Year by *Greek* Letters, you may obſerve they place them a different Way from the *Greeks*, ſetting the leſſer Number firſt, as if they were to be read backward, from the right Hand to the left; as NT here, denoting 450. The third Letter Λ, I take to ſtand for the Day of the Month, *viz.* the laſt of *Xandicus*, which is with us *April*; this and other names of Months, which are found in other Inſcriptions, being borrowed from the *Macedonians*, with very little Variation. That they were Idolaters, is plain by the Mention of their Country Gods, both here and in other Places: So that their Commerce with the *Jews*, did not, it ſeems, bring them to the Knowledge of the true God, or elſe they muſt have degenerated therefrom, and relapſed into Idolatry. The other Pillar towards the Weſt in Height and Circumference anſwers this, and has upon the Side the following Inſcription engraved.

Η ΒΟΥΛΗ ΚΑΙ Ο ΔΗΜΟC ΒΑΡΘΙΧΘΙΝ
ΑΜΡΙCΑΜCΟΥ ΤΟΥ ΙΑΡΙΒωΛΘΟΥC ΚΑΙ
ΜΟΚΙΜΟΝ ΥΙΟΝ ΑΥΤΟΥ ΕΥCΕΒΕΙC ΚΑΙ
ΦΙΛΟΠΑΤΡΙΔΑC ΤΕΙΜΗC ΧΑΡΙΝ.

The Date of this is not legible, neither does one know what Judgment to make of the thing it ſelf. That ſuch a Pillar ſhould be erected only to ſupport the Inſcription, and

and convey theſe Men's Names to After-Ages, without particularizing what they did to deſerve that Honour, is ſomething ſtrange: unleſs we may ſuppoſe it was a prevailing Vanity in theſe Eaſtern Countries thus to endeavour to eternize their Fame. An Inſtance whereof we have in Scripture, in *Abſalom*'s ſetting him up a Pillar, 2 *Kings* xviii. 18. and perhaps before him, in *Saul*, 1 *Sam.* xv. 12. Otherwiſe it may appear no improbable Conjecture, that the Pillar was erected long before upon ſome other Occaſion, and afterwards made uſe of to this End: And I look upon it as paſt all doubt that ſeveral other Inſcriptions which we ſaw, were much more modern than the Pillars, on which they were engraved.

Proceeding forward directly from the Obeliſk, about 120 Paces, you come to a magnificent Entrance, vaſtly large and lofty, and for the exquiſiteneſs of the Workmanſhip not inferior to any thing before deſcribed. I wiſh I could add, that it had not ſuffered the ſame Fate as the reſt, and then we might have ſeen a rare Piece of the ancient Beauty of the Place. This Entrance leads you into a noble Piazza of more than half a Mile long, 938 Yards according to our Meaſuring, and 40 Foot in breadth, encloſed with two rows of ſtately marble Pillars, 26 Foot high, and 8 or 9 about. Of theſe remain ſtanding and entire 129. but by a moderate Calculation there could not have been leſs at firſt than 560. Covering there is none remaining, nor any Pavement at the Bottom, unleſs it be buried

The Piazza.

ried under the Rubbiſh. But upon almoſt all the Pillars we found Inſcriptions, both in *Greek* and the Language unknown, of which we had time to take but very few, and thoſe not very inſtructive. But ſuch as they are I'll preſent you them here, without obſerving any other Order, but as they happened to be tranſcribed.

ΙΟΤΛΙΟΝ ΑΤΡΗΛΙΟΝ ΖΕΒΕΙΔΑΝ
ΜΟΚΙΜΟΤ ΤΟΤ ΖΕΒΕΙΔΟΤ .....
ΑCΘωΡΟΒΑΙΔΑΟΙ CΤΝ Α(Τ)Τω
ΚΑΤΕΛΘΟΝΤΕC ΕΙC ΟΛΟΓΕCΙΑΔΑ
ΕΝΗΙΟΡΟΙΑΝ ΕCΤΗCΑΝ ΑΡΕCΑΝΤΑ
ΑΤΤΟΙC ΤΕΙΜΗC ΧΑΡΙΝ ΞΑΝΔΙΚω
ΤΟΤ ΗΝΦ ΕΤΟΤC...

I give you, Sir, theſe Inſcriptions, as thoſe before, juſt as I found them, without any Amendments, ſo much as of literal Faults, only where a Letter, or piece of a Word was not legible, if I could make a probable Conjecture what it ſhould be, I have ventured to add it. The laſt ſeems to have been put up in Memory of an Embaſſy, performed by thoſe Men that are named therein, for ſettling a Commerce and Traffick, which was to their Satisfaction accompliſh'd: But with whom, till I can find out what place is meant by [b] ΟΛΟΓΕCΙΑΔΑ, I muſt remain ignorant.

[b] 'Tis not improbable that ΟΛΟΓΕCΙΑC might have been the Name of a Perſon. *Vologeſes* is a known Name in Hiſtory among the *Parthian* Kings; to which the other ſeems to bear a great Affinity.

I am

I am unwilling to entertain any Thoughts of *Getia* in *Macedonia*, or of *Olgaſſus*, a Place mentioned by *Strabo* in *Bithynia*, which comes a little nearer the Name, being both ſo remote, and the City of *Tadmor* ill contrived for a Place of Trade, being far from the Sea, and without the Advantage of any River. Yet the Magnificence of the Place ſhews they have not wanted Riches among them: And their Salt is a Commodity which ſtill brings them in a conſiderable Advantage. The Order of the numeral Letters you may take Notice is again inverted; but taking them the right Way, the Year 558 falls in with the laſt Year of the Reign of *Alexander Severus*, which is of our Lord 234.

About the Middle of the Piazza, upon another Pillar, was this following Inſcription.

Η ΒΟΥΛΗ ΚΑΙ Ο ΔΗΜΟC ΙΟΥΛΙΟΝ ΑΥΡΗΛΙΟΝ ΖΗΝΟΒΙΟΝ ΤΟΝ ΚΑΙ ΖΑΒΔΙΛΑΝ ΔΙCΜΑΛΑΧΟΥ ΤΟΥ ΝΑCCΟΥΜΟΥ CΤΡΑΤΗΓΗCΑΝΤΑ ЄΝ ЄΠΙΔΗΜΙΑ ΘЄΟΥ ΑΛЄΞΑΝΔΡΟΥ ΚΑΙ ΥΠΗΡЄΤΗCΑΝΤΑ ΠΑΡΟΥCΙΑ ΔΙΗΝЄΚЄΙ ΡΟΥΤΙΛΛΙΟΥ ΚΡΙCΠЄΙΝΟΥ ΤΟΥ ΗΓΗCΑΜЄΝΟΥ ΚΑΙ ЄΠΙΔΗΜΗCΑCΑΙC ΘΥΗΞΙΛΛΑΤΙΟCΙΝ ΑΓΟΡΑΝΟΜΗCΑΝΤΑΤЄ ΚΑΙ ΟΥΚΟΝΙCωΝΑ ΦЄΙΔΗCΑΝΤΑ ΧΡΗΜΑΤωΝ ΚΑΙ ΚΑΛωC ΠΟΛЄΙΤЄΥCΑΜЄΝΟΝ ωC ΔΙΑ ΤΑΥΤΑ ΜΑΡΤΥΡΗΘЄΝΤΑ ΥΠΟ ΘЄΟΥ ΙΑΡΙΒωΛΟΥ ΚΑΙ ΥΠΟ ΙΟΥΛΙΟΥ ..... ΤΟΥ ЄΞΟΧωΤΑΤΟΥ ЄΠΑΡΧΟΥ ΤΟΥ ΙЄΡΟΥ ΠΡΑΙΤωΡΙΟΥ ΚΑΙ ΤΗC ΠΑΤΡΙΔΟC ΤΟΝ ΦΙΛΟΠΑΤΡΙΝ ΤЄΙΜΗC ΧΑΡΙΝ ЄΤΟΥC ΑΝΦ.

This is as perfect an Inſcription as any I met with, by the help of which we may make a Judgment of all the reſt; at leaſt thus far, that they were put up in Memory of ſome, who had behaved themſelves, in thoſe publick Offices they bore, either in their own Republick, or under the *Romans*, with Commendation; this being a publick Place, where their Names and worthy Actions were recorded and tranſmitted to Poſterity. What I further obſerved particularly in this, was the want of the Name after ΙΟΥΛΙΟΥ, and took notice of the like Space vacant in the other Language under it; and in both places it ſeemed to be not worn out with Time, but voluntarily ſcratch'd out. Which confirms me in the Opinion that they are both one, and that the unknown was the Vulgar, as the *Greek* was the learned Language of the Place. Upon another Pillar in the ſame Walk was this.

ϹΕΠΤΙΜΙΟΝ ΟΥΟΡΩΔΗΝ ΤΟΝ ΚΡΑΤΙϹΤΟΝ ΕΠΙΤΡΟΠΟΝ ϹΕΒΑϹΤΟΥ ΔΟΥΚΗΝΑΡΙΟΝ ΚΑΙ ΑΡΟΑΠΕΤΗΝ ΙΟΥΛΙΟϹ ΑΥΡΗΛΙΟϹ ΕΑΛΜΗϹ ΚΑϹϹΙΑΝΟΥ ΤΟΥ Μ(Ε)ΛΕΝΑΙΟΥ ΙΠΠΕΥϹ ΡΩΜΑΙΩΝ ΤΟΝ ΦΙΛΟΝ ΚΑΙ ΠΡΟϹΤΑΤΗΝ ΕΤΟΥϹ ΗΟΦ.,. ΜΗΝΕΙ(Ξ)ΑΝΔΙϗω.

From another Pillar in the ſame Piazza was tranſcribed this broken Inſcription which follows, which I have endeavoured to make up from the former, believing them in Subſtance the very ſame, with ſome little Alteration of Names.

ϹΕΠ.

CЄ ΠΤΙΜ(ΙΟΝ ΟΥΟΡѠΔΗΝ) ΤΟΝ ΚΡΑ(Τ ΙCΤΟΝ
Є ΠΙΤΡΟ)ΠΟΝ CЄΒΑC(ΤΟΥ ΔΟΥΚ)ΗΝΑΡΙΟΝ ΚΑ[Ι
ΑΡΟΑΠЄ]ΤΗΝ ΙΟΥΛΙΟC ΑΥ[ΡΗΛΙ]ΟC Є[ΛΑΜΗC]
ΠΥΙΑCΟC Μ[ЄΛЄΝΑΙ]ΟC ΜΑΛѠΧΑ ΝΑCCΟΥΜΟ[Υ]
Ο ΚΡΑΤΙCΤΟC ΤΟΝ [ΦΙΛΟΝ] ΚΑΙ ΠΡΟCΤΑΤΗΝ
ΤЄΙΜΗC ЄΝЄΚЄΝ ЄΤΟΥC... [ΜΗΝЄΙΞ]ΑΝΔΙΚѠ.

This is ſo like the preceding, that I thought I might fairly take the Liberty to make theſe Additions to it. And what we may collect from both, and divers others of a like Import, is, that as the State, the Senate, and People, did ſometimes honour thoſe that had been in publick Truſt, with Inſcriptions upon theſe Pillars: So when this was not done by them, private Perſons had the Liberty to do the ſame for their Friends. And I ſhall give you an Inſtance by and by of one engraven by a Husband in Memory of his Wife. Upon ſeveral of theſe Pillars are little Pedeſtals jetting out about the middle of them, ſometimes one way only, and ſometimes more, which ſeem to have been the Baſes or ſtanding Places of Statues. But none of theſe are remaining; neither is it to be expected they ſhould, in a Place which has been ſo long in the Hands of the *Turks*. On theſe Pedeſtals we ſaw many Inſcriptions, ſometimes when there were none upon the Body of the Pillar, and ſometimes when there were. As for Inſtance this that follows upon the Pedeſtal, thus.

CЄΠTIMION AIPANHN OΔAINOΘOY TON ΛAMΠPOTATON CYNKΛHTIKON. And upon the Body of the Pillar this imperfect one; which I dare not venture to fill up, but ſhall give it you as we found it.

ЄΞA ..:... NTωN AYPHΛI...:. PHAIOΔωP...:; CTPATIωTHC Λ€ ..... KHC TωN ΠATPωN TЄIMHC KAI ЄYXAPICTIAC KAPIN Є TOYC ΓΞΦ.

We ſee they eſteemed it very honourable to have their Memories preſerved after this Manner; but it is but little Knowledge of them we can get from hence, ſave now and then the Time when they lived. As here, 563 Years after the Death of *Alexander* reach to the Year of our Lord 239. Another Inſcription in the ſame Piazza was thus.

H BOYΛ[H KAI O ΔH]MOC CЄΠTIMION TON KPATICTON Є[ΠITPOΠON C]ЄBACTOY ΔOTKHN[APION].... ЄOΔOTHN THC MHT[POKOΛω]NЄIAC KAI ANAKOMICA(N-TA T)AC CYNOΔIAC Є Ξ IΔIωN KAI MAPTYPHΘЄNTA YΠO TωN APXЄMΠORωN KAI ΛAMΠPωC CTPATHΓHCANTA KAI AΓORANOMHCANTA THC AYTHC MHTPOKOΛωNЄIAC KAI ΠΛЄICTA OIKOΘЄN ANAΛωCANTA KAI APЄCANTA THTЄ AYTH BOYΛH KAI Tω ΔHMω KAI NYNЄI ΛAMΠPωC CYMΠOCIARKON TωN TOY ΔIOC BHΛOY IЄ[P]ωN TЄIMHC ЄNЄKЄN ЄT.....
ΞANΔIKω.

This

This affords a ſufficient Confirmation of what I before obſerved, that theſe were honorary Inſcriptions in Memory of thoſe that had behaved themſelves well in publick Offices; of which we have ſeveral mentioned here, whereof ſome are very well known, but the others not eaſy to be met with in Books. By the Word ΜΗΤΡΟΚΟΛωΝΙΑC, we way be aſſured that though the City was reduced by the *Romans* into the Form of a Colony, yet it had a peculiar Mark of Honour ſet upon it, to ſignify that it was the Chief of their Colonies in theſe Oriental Parts. That the Authority alſo of their Senate and People was continued to them. And beſides that there was a Society of Men, either Curators of the Temple of *Jupiter Belus* (to whom the Temple before deſcribed perhaps was dedicated,) or Overſeers of the Sports and Feſtivals that were celebrated in honour of him; of which Sodality this *Septimius* was, when this Inſcription was made, a *Symposiarch*, perhaps their Chief and Governour. By this too we find they did not wait for the Deaths of thoſe they thus honoured, before they provided for the Preſervation of their Memories; but famous Men were thus regiſtered for After-Ages even while they were alive. Upon one of theſe Pedeſtals before deſcribed, not far from the former, was the following Inſcription; which I valued the more for the little Remainder it has preſerved of the Name of *Palmyra*, by which the Place was known to the *Romans*.

...ΥΠΙΑΙΟΝ ΟΥΟΡ«ΔΗΝ [CΥΝΚΑ]ΗΤΙΚΟΝ ΚΑΙ ΒΟΥΛ€ΥΤΗΝ ΠΑΑΜΥΡΗΝΟΝ ΒΗΛΑ ΚΑΒΟCΑΡCΑ ΤΟΝ ΦΙ[ΛΟΝ] Τ€ΙΜΗC ΧΑΡΙΝ €ΤΟΥC ΟΦ.

The Banquetting Houſe.

The upper End of this ſpacious Piazza was ſhut in by a row of Pillars, ſtanding ſomewhat cloſer than thoſe on each Side; and perhaps there might have been a kind of Banquetting-Houſe above, but now no certain Footſteps thereof remain. But a little farther to the left Hand, and, it may be continued, with the former Walk, lie the Ruins of a very ſtately Building, which I am apt to believe might have been for ſuch an uſe. 'Tis built of better Marble, and has an Air of Delicacy and Exquiſiteneſs in the Work, beyond what is diſcernible in the Piazza. The Pillars which ſupported it are of one entire Stone; and on one of them that is fallen down, but ſo firm and ſtrong that it has received no Injury thereby, we meaſured, and found 22 Foot in length, and in compaſs 8 Foot and 9 Inches. Among theſe Ruins we found the only *Latin* Inſcription we ſaw in the Place, and that ſo imperfect, there is but little of it intelligible.

..... *es Orbis & Propagatores Generis Humani D. D. N. N.* Diocleſianus ..... *ſſimi Impp. Et* Conſtantius *&* Maximianus *Nobb. Cæſ. Caſtra feliciter condiderunt.*

And upon the ſame Stone a little lower,

..... *ntes* Oſſiano Hieroclete, *V. P. Præſ. Provinciæ D. N. M. O. Eorum.*

The

The Name of *Maximianus Hercules*, who was Partner in the Empire with *Diocleſian*, which ſhould have followed in the Inſcription, ſeems to have been on purpoſe ſcratch'd out and defaced, for what reaſon I cannot gueſs. The reſt is loſt by the breaking the Stone.

In the Weſt Side of the great Piazza are ſeveral openings for Gates leading into the Court of the Palace: Two whereof, one would eaſily believe, when they were in their Perfection, were the moſt magnificent and glorious in the World, both for the Elegancy of the Work in general, and particularly for thoſe ſtately Porphory Pillars with which they were adorned. Each Gate had four, not ſtanding in a Line with the others of the Wall, but placed by couples in the Front of the Gate, facing the Palace, two on one Hand, and two on the other. Of theſe remain two entire, and but one ſtanding in its Place. They are about 30 Foot in length, and 9 in circumference; of a Subſtance ſo exceeding hard, that it was with great difficulty we broke off a few Shivers to bring home with us for a Pattern of the Stone, the Art of making which I think is quite loſt. We ſaw ſeveral other broken pieces of Porphyry, but neither of ſo accurate a Mixture and Compoſition, nor ſo large as the former. The hard Fate of one I could not but lament, when I ſaw it debaſed to ſupport the Corner of a little Hutt, ſcarce good enough for a Dog-Kennel, or a Hogſty. The Palace it ſelf is ſo entirely ruined, that no Judgment can be made what it was in its ancient Splendor, either for the Figure or Workmanſhip

The Palace.

manſhip thereof. There is only here and there a broken Piece of a Wall remaining, beat into pieces by Violence, and conſumed by Time to that Degree, that without the help of Tradition we could hardly be well aſſured, that a Royal Palace did once fill that Space. We may gueſs however that it fronted the famous Piazza before mentioned, and was ſurrounded with rows of Pillars of different Orders, many of which are ſtill ſtanding, ſome plain, and ſome wrought and channell'd, as thoſe immediately encompaſſing the Temple. And upon thoſe little Pedeſtals which ſtood out of the middle of ſome of them, I obſerved ſeveral Inſcriptions, but could not conveniently take more than one, which together with the Pillar that ſupported it was fallen to the Ground. 'Twas this.

ΜΑΡΘΕΙΝ ΑΛΕΞΑΝΔΡΟΥ ΤΟΥ ΚΑΠΑΔΗΤΟΥ ΟΥΑΒΑΛΛΑΘΟΥ ΤΟΥ ΣΥΜΩΝΟΥ ΣΟΡΑΙΧΟΣ ΑΙΡΑΝΟΥ ΑΝΗΡ ΑΥΤΗΣ ΜΝΗΜΗΣ ΕΝΕΚΕΝ ΜΗΝΕΙ ΔΥΣΤΡΩ ΤΟΥ Ϛ Υ ΕΤΟΥΣ.

If the reſt were of a like Nature with this, we have loſt no great matter by not taking them, this being only a Memorial, which a kind Husband cauſed to be ſet up in honour of his Wife. The Month *Dyſtrus* anſwers our *March*, and the Year 490 from the Death of *Alexander* the *Great*, the Year of our Lord 166.

I omitted to mention before, that under the long Walk runs a Current of hot Sulphureous Waters; and there is a Well and other

Paſſages

Paſſages down to them. But whatever they may have been of old, they are not now ſo convenient as another about half a Mile Weſtward from hence; where there is a very good Deſcent into the Water, and it is ſtill uſed by the People to bathe in. Near to which, upon the Pedeſtal of a broken Pillar, (or perhaps it might be an Altar) remains this following Inſcription.

ΔΙΙ ΥΨΙCΤῼ ΜЄΓΙCΤῼ ΚΑΙ ЄΠΗΚΟῼ
ΒῼΔΑΝΟC ΖΗΝΟΒΙΟΥ ΤΟΥ ΑΙΡΑΝΟΥ
ΤΟΥ ΜΟΚΙΜΟΥ ΤΟΥ ΜΑΤΘΑ ЄΠΙ
ΜЄΔЄΤΗ COH ΑΙΡЄΘЄΙC ЄΦΚΑC
ΠΗΓΗC ΥΠΟ ΙΑΡΙΒῼΛΟΥ ΘЄΟΥ ΤΟΝ
Βῼ [forſan ΒῼΜΟΝ] ЄΞ ΙΔΙῼΝ
ΑΝЄΘΗΚЄΝ ЄΤΟΥC ΔΟΥ ΜΗΝΟC
ΥΠЄΡΒЄΡЄΤΑΙΟΥ Κ.

I am pretty confident that the Word I have mark'd with a Line under it, is rightly taken, and therefore know not what to gueſs it to be, unleſs the proper Name of the Fountain. And upon that Suppoſition the Inſcription is eaſily intelligible, ſhewing that *Bolanus*, Son of *Zenobius*, &c. being elected Overſeer or Curator of this fountain, under *Jaribolus*, built this Altar to *Jupiter*, in Year of *Alexander* 474. *i. e.* of our Lord 150. and on the 20th of *October*, if the laſt *Kappa* be a Numeral, as I ſuppoſe it muſt. But who this *Jaribolus* was, on whom they beſtow, as generally upon the *Roman* Emperors, whoſe Names occur in the Inſcrip-

scriptions, the Title of ΘΕΟC, is not so facile a Conjecture. They were under the *Parthians*, before the *Romans* fell in amongst them; but the Date shews this to be after the time of *Hadrian*, and so after their coming. Nay, and in an Inscription before mentioned, which is of a later Date than this by 88 Years, we have the Name of the same Person. Hot sulphureous Baths are things very frequent in this Country; and thence it was that it obtained the Name of *Syria Salutifera*. The Scent of the Waters here is much like those of *Bath* in *England*, but not so strong, neither is the Taste so offensive. On the contrary, when they have run so far from the Fountain, as to become cold, they are very potable, and are the only Waters the Inhabitants use. But we, during our Stay there, sent to a Fountain of very excellent Water, about an Hour distant from the City.

On the East Side likewise of the long Piazza stands, if I may use such an Expression, a Wood of Marble Pillars, some perfect, and others deprived of their beautiful Capitals; but so scattered and confused, that it is not possible to reduce them into any Order, so as to conjecture to what they anciently served. In one Place are eleven together in Square after this manner : : : : : : paved at the Bottom with broad flat Stone, but without any Roof or Covering. And at a little Distance from that stands the Ruins of a small Temple, which by the Remains seems to have been for the Workmanship very curious: But the

The little Temple.

Roof is wholly gone, and the Walls very much defaced and conſumed with Time. Before the Entrance which looks to the South, is a Piazza ſupported by ſix Pillars, two on one Hand of the Door, and two on the other, and at each End one. And the Pedeſtals of thoſe in the Front have been filled with Inſcriptions, both in *Greek* and the other Language; but they are now ſo obliterated and worn out as not to be intelligible. The moſt perfect was this that follows.

ΜΑΛΕΝΤΟΝ ΚΑΙ ΑΓΡΙΠΠΑΝ ΙΑΡΑΙΟΥ ΤΟΥ ΡΑΑΙΟΥ ΓΡΑΜΜΑΤΕΑ ΓΕΝΟΜΕΝΟΝ ΤΟ ΔΕΥΤΕΡΟΝ ΕΠΙΔΗΜΙ[Α] ΘΕΟΥ ΑΔΡΙΑΝΟΥ ΑΛΙΜΜΑ ΠΑΡΑΣΧΟΤΑ ΞΕΝΟΙΣ-ΤΕ ΚΑΙ ΠΟΛΕΙΤΑ[ΙΣ] ..... And a little below were theſe ſtragling Letters viſible.

ΕΝΗ.... Ν ΥΠΗΡΕΤΗΣΑΝΤΑ ΤΗΤ.... ΣΤΡΑΤΕΥΜΑ ΤΟΥ... ΤΠΟ.... ΗΚΑΙ..... ΤΟΝ ΝΑΟΝ ΤΟΝ.... ΔΙΟΣ.... ΝΤωΤ.....

I ſhould have imagined the ΚΑΙ to have been a Copulative, and the ſecond Name *Agrippa* diſtinct from the former, but that the Words following in the ſingular Number, will not admit of ſuch a Conſtruction. The Perſon then in Memory of whom this Inſcription

scription was made, must have been named *Malentus Cæagrippa*, who bearing such an Office as Scribe, or the like, in the Expedition of *Adrian*, the Emperor, performed an Act of publick Beneficence and Generosity, both to Strangers and Citizens, denoted by the Word [c] ΑΛΙΜΜΑ, or ἄλειμμα, which signifies Unction. Perhaps he distributed amongst them sweet Oils, to be used in or after their Bathings. 'Tis pity what follows is so imperfect; and especially that we cannot find out the Date: for that might have directed us to the precise Time of *Hadrian*'s Expedition into these Oriental Parts, where he made great Conquest, and enlarged the Bounds of the *Roman* Empire.

The Sepulchres.

But as great a Curiosity as any were their Sepulchres, being square Towers, four or five Stories high, and standing on both Sides of a hollow Way, towards the North Part of the City. They stretch out in length the Space of a Mile, and perhaps formerly might extend a great Way further. At our first view of them, as we entred the Place, we could not conjecture what they were; some thought them the Steeples of ruined Churches, and were in hopes we should have found some

[c] *Plin. Secun. Ep. l.* 2. Tells us of one, who was accused of an illegal Exaction of Money from a Province, *Titulo Unguentarii*; now what was in that Case unjustly exacted, might be in this a voluntary Donation, not of the Province to the Governor, but of a great Man to the People. Or else *Unguentarium* may be supposed to be a Donative, like *Clavarium* or *Culinarium*, used sometimes by the *Romans*.

footſteps of Chriſtianity here. Others took them to have been Baſtions, and part of the old Fortifications, tho' there is not ſo much as any Foundation of a Wall to be ſeen. But when we came a Day or two after, more curiouſly to enquire into them, we quickly found their uſe. They were all of the ſame Form, but of different Splendor and Greatneſs, according to the Circumſtances of their Founders. The firſt we viewed was entirely Marble; but is now wholly in Ruins, and nothing but a heap of broken Stones, among which we found the Pieces of two Statues, one of a Man, and another of a Woman, cut in a ſitting, or rather leaning Poſture; and the Heads and part of the Arms of both being broken off, but their Bodies remaining pretty entire; ſo that we had the Advantage of ſeeing their Habits, which appeared very Noble, but more approaching the *European* Faſhion, than what is now in uſe in the Eaſt; which inclined me to believe they might be *Romans*. Upon broken pieces of Stone tumbled here and there, we found ſome as broken Inſcriptions, but not affording any perfect Senſe, they are not worth the tranſcribing.

Many other Sepulchers there were, as much gone to decay as this, which therefore we paſt by, to go to two, which ſtood almoſt oppoſite to one another, and ſeemed moſt perfect of any, though not without marks of the *Turkiſh* Malice. They are two ſquare Towers, rather larger than ordinary Steeples, and five Stories high, the outſide being of common Stone, but the Partitions and Floors within of good Marble; and beautified too

with very lively Carvings and Paintings, and Figures both of Men and Women, as far as the Breaſt and Shoulders; but miſerably defac'd and broken. Under theſe Statues, or by their ſides, are in the unknown Character, the Names probably of the Perſons there buried, or by them repreſented; or elſe ſome other Memorials of them. We entred one of theſe by a Door on the South Side, from which was a Walk croſs the whole Building juſt in the middle. But the Floor was broke up, and ſo gave us a Sight of a Vault below, divided after the ſame manner. The Spaces on each Hand were again ſub-divided into ſix Partitions by thick Walls, each Partition being capable of receiving the largeſt Corps: And piling them one above another, as their way appears to have been, each of thoſe Spaces might contain at leaſt ſix or ſeven Bodies. For the loweſt, ſecond and third Stories, thoſe Partitions were uniform, and altogether the ſame; ſave from the ſecond Floor, which anſwered the main Entrance, one Partition was reſerved for a Stair-Caſe. Higher than this, the Building, being ſomething contracted towards the top, would not afford Space for the Continuation of the ſame Method: Therefore the two uppermoſt Rooms were not ſo parted, nor perhaps ever had any Bodies lain in them. Unleſs it was that of the Founder alone, whoſe Statue wrapt up in Funeral Apparel, and in a lying Poſture, is placed in a Nich, or rather Window in the Front of the Monument, ſo as to be viſible both within and without. Near to this Statue was the following Inſcription.

TO

ΤΟ ΜΝΗΜΕΙΟΝ ϑΚΤΙCΑΝ ΕΛΑΒΗΛΕC
ΜΑΝΝΑΙΟC CΟΧΑΕΙC ΜΑΛΧΟC
ΟΥΑΒΑΑΛΑΘΟΥ ΤΟΥ ΜΑΝΝΑΙΟΥ ΤΟΥ
ΕΛΑΒΗΛΟΥ ΑΤΤω ΚΑΙ ΤΙΟΙC ΕΤΟΥC
ΔΙΥ ΜΗΝΟC ΞΑΝΔΙΚΟΥ.

'Tis a little doubtful whether ΑΤΤω ſhould not rather be made ΑΤΤΟΙC; or elſe there muſt be a Fault in the Verb, and all thoſe but the Names of one Perſon. The other Monument on the other Side of the Way is very much like this; only the Front and Entrance are towards the North, and 'tis not altogether ſo Polite, nor ſo well Painted. But the Carvings are as good, and it ſhews altogether as Stately and Magnificent as the former. Beſides, it has the Advantage in Age of a whole Century of Years: As appears from the Date of the following Inſcription. 'Tis placed above a Nich in the Front, adorned with handſom Borders and Corniſhes; the Place, doubtleſs, of ſome Statue, and probably that of the Founder.

ΜΝΗΜΕΙΟΝ ΑΙΩΝΙΟΝ ΓΕΡΑC
ΩΚΟΔΟΜΗCΕΝ ΓΙΧΟC ΜΟΚΙΜΟΥ ΤΟΥ
ΚΑΙΔΚΙΑΔCICΟΥ ΤΟΥ ΜΑ..... ΟΥ
ΕΙCΤΕ ΕΑΤΤΟΝ ΚΑΙ ΤΙΟΥC ΚΑΙ
ΕΓΓΟΝΟΥC ΕΤΟΥC ΔΙΤ ΜΗΝΕΙ
ΞΑΝΔΙΚω.

This is the moſt ancient Inſcription I met with in *Tadmor*, the 314th Year from the Death of *Alexander* the Great, preceding the Birth of our Saviour about Ten Years. The other alſo is between Twenty and Thirty Years before the Reign of *Hadrian*. and conſequently before the *Romans* got Footing here. And from theſe ſumptuous Structures, and theſe coſtly *Mauſolæa*, we may reaſonably conclude, they were a potent and opulent People, before they became ſubject to the *Romans*, and were not obliged to them for their Greatneſs.

And now I believe I have wearied you ſufficiently by leading you up and down the ancient and famous City of *Tadmor*, and giving you ſo dry an Account of our Employment there. After four Days Stay we returned, not the way that we came, but proceeding Eaſtward towards the River *Euphrates*. In our way to which, the third day paſſing thro' a Village called *Tieve*, upon a Stone ſet wrong End upwards, in the midſt of the Wall of the Moſch, we met with the following Inſcription.

ΔΙΙ ΜΕΓΙΣΤΩ ΚΕΡΑΥΝΙΩ ΥΠΕΡ ϹΩΤΗΡΙΑϹ ΤΡΑ: ΑΔΡΙΑΝΟΥ ϹΕΒ... ΤΟΥ ΚΥΡΙΟΥ ΑΓΑΘΑΝΓΕΛΟϹ ΑΒΙΛΗΝΟϹ ΤΗϹ ΔΕΚΑΠΟΛΕΟϹ ΤΗΝ ΚΑΜΑΡΑΝ ωΚΟΔΟΜΗϹΕΝ ΚΑΙ ΤΗΝ ΚΑΙΝΗ.... ΕΞ ΙΔΙωΝ ΑΝΕΘΗΚΕΝ ΕΤΟΥϹ ΕΜΥ ΜΗΝΟϹ ΛωΟΥ.

And under this was another in the ſame Language and Character we had ſeen at *Tadmor*; I was ſurprized to find ſuch an Inſcription in this Place, nor can any way gueſs how they ſhould come by it: And the mention of *Decapolis* makes me ſtill more in the Dark. If one might extend the Bounds of *Decapolis*, as ſome are ſaid to have done, as far as *Cœloſyria*, and comprize under this Name again all *Syria*, *Phœnicia* only excepted, then need it not be brought from elſewhere, but firſt ſet up in this Village. But this will not be allowed by thoſe, who make *Decapolis* only a part of *Paleſtine*. The matter of Fact it contains is only an Account of the Magnificence of this *Agathangelus Abilenus*, whoever he was; who for the Safety of the Emperor *Hadrian*, erected at his own Charges, and dedicated to *Jupiter* the Thunderer, a Royal Banquetting-Houſe, (for ſo I

take [d] ΚΑΜΑΡΑ to ſignify) and a Bed of State; for after ΚΛΙΝΗ there is doubtleſs a Letter omitted, and it ought to be ΚΛΙΝΗΝ. The Date 445 agrees to the Year of our Lord 123. which was the Seventh of the Reign of *Hadrian*. And the Month ΛωΟC is our *Auguſt*.

Arſoffa. The next Day we paſt by the Ruins of a large Monaſtery of the *Maronites*, as I gueſs it to have been by an Inſcription we met with upon the Capitals of ſeveral Marble Pillars, which ſupported the middle Iſle of a handſome Church, which was to this effect.

† ΕΠΙ ΕΓΡΓΙΟ ΕΠΙΣΚ°. Τ⊖ ΣΤΝΓΕΝ" ΜΑΡ⊖ΝΙ⊖ Τ⊖-Χ⊖ΡΕΠΙΣΚ°.

From thence we paſt on, and came the ſame Night to *Euphrates*, and having travelled two Days on the Banks of that famous River, we came to the Tents of the King of the *Arabs*, who had furniſh'd us with a Guide for our Voyage. With him we remained two Nights, and in two Days Travel more came back ſafe to *Aleppo*, having been out in the whole juſt eighteen Days.

---

[d] This Word I find both in *Tacitus* and *Strabo*, uſed for a kind of Ships or Boats, long, narrow, light, and capable of receiving twenty or at moſt thirty Men; but what they ſhould do with Boats in an inland Town, without either River or Lake near it, I cannot imagine. I rather adhere to the other ſignification.

The

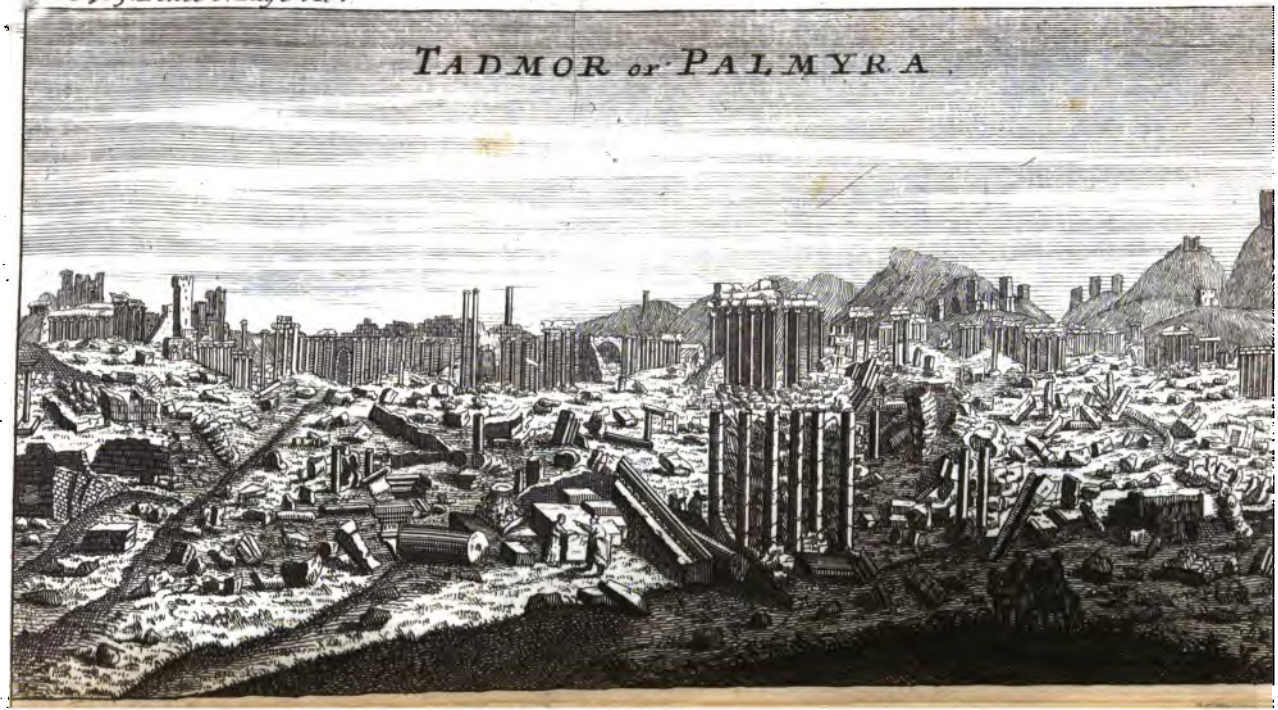
The Reverend and learned Author of this Account, cannot with Juſtice be cenſured, if ſome Minute Particulars of the Hiſtory of this Place have eſcaped his Memory, being obliged to write without recourſe to the Books proper for his purpoſe, which were not to be had in that Country. We have ſince procured a curious Proſpect of theſe noble Ruins, taken on the Place; which, with ſome further Remarks thereon, are here Publiſhed.

An Extract of the Journals of two several Voyages of the English Merchants *of the Factory of* Aleppo, *to* Tadmor, *anciently called* Palmyra.

OUR Merchants of this worthy Factory, being generally Men of more than ordinary Birth and Education, have not been wanting (as the intervals of Leisure from their gainful Traffick would permit) to make Voyages of Curiosity, to visit the celebrated Remains of Antiquity in those Parts, whereby the once flourishing State of the World, under the *Roman Empire*, is abundantly evinced. And being inform'd by the Natives, that the Ruins of the City of *Tadmor* were more considerable than any they had yet seen, they were tempted to enterprize this hazardous and painful Voyage over the *Desart*; but having been, by the Perfidy of the *Arabs*, disappointed of their Desires in their first Attempt, they were obliged to defer their Curiosity, till they could better provide for their Security: whereof being assured, from the Confidence some of them had in the Friendship of *Assyne* then King of the *Arabs*, they adventured again, in the Year 1691, and had full Liberty to visit, observe and transcribe what they pleased. What

Vol. 3. Plate 1. Page 120.

TADMOR or PALMYRA.



What Account they there took, the Publick has already ſeen in our Laſt, ſince which, by the Favour of Mr. *Timothy Lanoy* and Mr. *Aaron Goodyear*, two very eminent Merchants, who were both in the firſt Voyage, we have received not only the Draught of the Proſpect of thoſe noble Ruins, taken upon the Place, (of which we here give a Copy,) but alſo the Journals of both the Voyages; which, for the Satisfaction of the Curious, we have thought fit to publiſh.

The firſt Voyage, Anno 1678.

July 18. At Five in the Morning, we ſet out from *Aleppo*, being ſixteen *Engliſh*; but with Servants and Mulettiers in all Forty; and in four Hours and an half, travelling South by Eaſt, we arrived at a Village call'd *Cafferabite*, being at the Edge of the Deſart; here we repoſed the reſt of that Day.

July 19. We roſe at one in the Morning, and directed our Courſe S. S. E. over the Deſart, for a Fountain call'd *Churraick*; but our Guide loſing his Way, there being no Path, 'twas near Noon before we found it: which made us doubt of our Safety. This Well has no Signs near it to diſcover it by. Here we pitched our Tents, and refreſh'd our Selves and Horſes; and the Water being of a purgative Quality, made us ſome Diverſion. In our way, we found two *Arabs* with two Aſſes, one whereof carried Water and a little Bread, the other they rod on by turns; they had one Gun, with which they ſhot

ſhot Antelopes, the Bullet being a hard Stone broken round, and caſed with Lead; they had on the Palms of their Hands, Elbows, Knees and Feet, ſome Antelope-Skin tied, that they may be able to creep the better on the Ground, to Shoot; one of the Aſſes walking by as a Stalking-horſe, and the *Arab* intimating the Cry of the Gazel till he got within Shot: Theſe *Arabs* are called *Selebee*. At the Well, came to us ſome *Arabs* that were making Aſhes of the ordinary Sort of Weeds call'd *Chuddraiſe*, *Ruggot* and *Cuttaff*; theſe they cut and dry, and putting them into a Pit, ſet Fire to them, and the Aſhes cake at the Bottom. The Aſhes they carry to *Eglib* and *Tripoli*, to make Soap of: But the beſt Sort of Aſhes are made of the Weed *Shinon*, which grows about *Tadmor*, *Soukny*, *Tibe* and *Yarecca*; it grows like Broom in *England*, and in Shape reſembles Coral.

July 20. We roſe at Four in the Morning, and Travelling two Hours E. S. E. we arrived at *Andrene*, where we found the Ruins of two or three Churches, and of a great Town lying in a large Plain; where having tarried about an Hour and an half, and taken ſome fragments of *Greek* Inſcriptions, which afforded no certain Senſe, but yet were evidently Chriſtian, we march'd again S. by E. and in about four Hours time came to a pleaſant Aqueduct call'd *Sheck-alal*; this Aqueduct is cut through the main Rock, for a great way from the Mountains; and where it ends, the *Arabs* have made a Garden, which afforded us Melons, Cucumbers, Purſlain, *&c.* In a Grott hard by, there dwelt an *Arab* with his Family;

Family; he had a dozen *Buffalo's*, which they uſed both for their Milk, and to plow the Ground, Sowing both Wheat and Barley: Hither the *Arabs* reſort, when they have committed any Robbery about *Aleppo*, or *Hama*, and here they repoſe, and divide the Spoil.

July 21. We roſe at four in the Morning, and riding two Hours South, we came to a Ruin call'd *Briadeen*; here we found the following Inſcription on a Stone, good part in the Ground:

ΑΦΙΕΡωΘΗ ΑΑΙΑΥΝΔΙΟΥ ΤΟΥ ΑΜΦ ΕΤΟΥC
ΔΙΑ ΜΑΤΕΡΝΟΥ ΚΑ(Ι Π)ΑΠΠΟΥ ΚΑΙ ΜΑΙΚΟΥ ΚΝ ΤΜΝ
——— Υ ——— Ν

From hence going South-Eaſt, in four Hours more we came to a Well called *Coſtal* (which ſignifies a *Spring in Arab.*) Moſt part of our way through the Deſart we were troubled with *Rat-holes* in great numbers, like Coney-boroughs, which by the ſinking in of the Earth, very much incommoded our Horſes and Mules. Theſe *Rats* have at the Ends of their Tails a buſh of Hair, and the *Arabs* eat them all, excepting one part. From this Well we aroſe about four in the Afternoon, and began to aſcend ſmall Hills, covered with Trees, which, for the moſt Part, were the ſmall *Piſtacho's* which the *Arabs* pickle with Salt; but eaten green, are good to quench Thirſt. We travelled on three Hours up the Hills, where we pitch'd that Night, having no other Water but what we carry'd with us; and at Night we had a ſmall Shower of

of Rain, a thing unuſual in that Country at that time of the Year.

July 22. we roſe by Two in the Morning, and Travelling E. S. E. we came by Eleven to a Well call'd *G'hor*, where we found it very hot, and ſaw ſeveral prints of Horſes Feet, ſo that we ſuſpected ſome *Arabs* had newly paſt that way.

July 23. we roſe by One in the Morning, and travelling moſt Eaſt, we came to a large Plain, where we ſaw before us, on a high Mountain, a great Caſtle, call'd by the *Arabs Anture*. When we had travelled two or three Hours in this Plain, we eſpied an *Arab* driving towards us a Camel, with his Lance, ſo faſt, that he came on a round Gallop, and we ſuppoſed him ſent as a Spy: being come up to us, he told us he was of *Tadmor*, and that his Prince, the *Emir Melkam*, had that Day made Friendſhip with *Hamet Shideed* another Prince, and that together they had four hundred Men; ſo he kept us Company an Hour or two, and enquired of our *Muletters* if we were not *Turks* diſguiſed, with intent to ſeize on *Melkam*; for we travelled with a *Bandiero*, the Impreſs being a *Hanjarr* or *Turkiſh* Dagger, and a Half-Moon. We told him we were *Franks*, which, he could hardly believe, wondering that we travelled thus in the Deſart, only out of Curioſity. Being come near to *Tadmor*, he went a little before us, and on a ſudden run full ſpeed towards the Ruins, we not endeavouring to hinder him. Our Guide told us he was gone to acquaint the *Arabs* who we were, and that we ought to ſuſpect and prepare for the worſt;

worſt; ſo we diſmounted twenty of our Servants, each having a long Gun, and Piſtols at his Girdle, and placed them abreaſt before us: we following at a little diſtance behind, on Horſe-back, with Carbines and Piſtols. In this order we proceeded, and came to a moſt ſtately *Aqueduct*, which runs under Ground in a direct paſſage five Miles, and is covered with an Arch of Baſtard Marble all the Way, and a Path on both ſides the Channel for two Perſons to walk abreaſt; the Channel it ſelf being about an *Engliſh* Yard in breadth, and $\frac{3}{4}$ of a Yard in depth. At twenty Yards Diſtance all the way are Ventiducts for the Air to paſs, and the holes are ſurrounded with ſmall Mounts of Earth to keep the Sand and Duſt from falling down. We marched cloſe by theſe Mounts, which might ſerve us for Defence, expecting every moment that the *Arabs* would come to aſſail us, having the Diſadvantage of Sun and Wind in our Faces: Wherefore we travelled hard to gain an Eminence where we might Poſt our ſelves advantagiouſly, and ſtop and repoſe a little, to conſider what we had to do. The *Arabs* finding us to come on with this Order and Reſolution, thought not fit to adventure on us, ſo we gained the Hill, from whence we might diſcern theſe vaſt noble Ruins, having a Plain like a Sea for greatneſs to the Southwards of it. Here having refreſh'd our Men, we fetch'd a little Compaſs and deſcended by the Foot of a Mountain, on which ſtands a great Caſtle, but uninhabited. Here two *Arabs* came to us with Lances, one being Chiah to *Melkam*, and

and we ſent two to meet them; they gave the *Salam alika*, and ours returned the *Alika ſalam*, and advancing to our Company, told us the *Emir* had underſtood of our coming, and had ſent them to acquaint us that he was our Friend, and that all the Country was ours. We ſent back with them our *Janizary* and a Servant to viſit the Prince in his Tents, which were in a Garden. In the mean time we diſmounted at a watering Place amidſt the Ruins, but did not unload till our *Janizary* and Servant returned with the *Emir*'s *Teſcarr*, aſſuring us of Friendſhip and Protection, a Writing which the *Arabs* were never known to violate before. With them came alſo one that belonged to the *Sheck* of the Town, for whom we had Letters from *Uſeffe Aga* the *Emeen* of *Aleppo*. He deſired us for greater Security to pitch our Tents under the Town Walls, which is in the Ruins of a great Palace, the Wall yet ſtanding very high, the Town within but ſmall, and the Houſes excepting two or three no better than Hog-ſties. So we pitched in a deep ſandy Ground where we found it exceeding hot. Here we waited till three of the Clock without eating any thing, expecting the *Sheck* ſhould have preſented us according to the uſual Cuſtom of the *Turks* to their Friends, and have given ſome anſwer to the Letters we brought him; but on the contrary we found by the Geſture of the People, that we had Reaſon to ſuſpect them. Hereupon two of our Company believing that the want of a Preſent to the *Emir* was the Cauſe thereof reſolved to adventure to

give

give him a Viſit, and taking the *Janizary* and one Servant, they carried him a Preſent of two pieces of Red Cloth, and four of Green, and ſeveral other things; Being come he welcomed them into his Tent, and placed the one on his right Hand and the other on his left. *Melkam* was a young Man, not above five and twenty, and well featur'd, and a moſt excellent Horſe-man; *Hamet Shideed*, the other Prince, was more elderly, as about forty Years of Age, and was not in the Tent, but ſat under a *Palm-Tree* near it. He treated them with *Coffee*, *Camel's-fleſh* and *Dates*, and enquired of their Journey, and the Cauſe of their coming: They told him 'twas only Curioſity to ſee thoſe Ruins; he ſaid that formerly *Solomon Ibnel Doud* built a City in that Place, which being deſtroyed, was built again by a ſtrange People, and he believed, that we underſtanding the Writing on the Pillars, came to ſeek after Treaſure, he having but ſix Moons before found a Pot of *Corra Cruſſes*. After this he went out of the Tent, leaving them ſmoaking Tobacco, to the *Janizary* and Servant, and told them, that never till that Day any *Franks* had been at that Place, and that now we knew the way through the Deſert, we might inform the *Turks* to their Ruin and Deſtruction, ſo that 'twould be convenient for them to deſtroy us all: But that we coming as Friends, he would only have 4000 Dollars as a Preſent, elſe he would hang them and the two *Franks* up, and go fight the reſt. This Meſſage being brought them, they wiſh'd they had excus'd themſelves from

this

this Embaſſy, and anſwered, they could ſay nothing to that Demand, not knowing our Minds, but if he would permit them to go and ſpeak with the reſt, they would return an Anſwer. Hearing this, he threatned preſent Death, but at length gave leave to our *Janizary* to carry us a Letter from them, wherein they ſhewed the Danger they were in, and earneſtly entreated us to redeem them, the Price ſet on them being 2000 Dollars, one half in Money, the other half in Goods; as Swords, Cloaths, Tents, *&c.* which the *Emir* promiſed to eſtimate at their Worth.

This Letter amazed us mightily, and a little before it arrived, we underſtanding a little, and fearing more ill Treatment to our Friends, were getting ready to free them or die with them. The Garden where *Melkam* lay, was about half a Mile from the Tents, full of *Palm-Trees*, and had no Walls, but looſe Stones piled up Breaſt high about them, ſo we deſigned to have gone ſuddenly and given two or three Volleys on them, e'er they could get to Horſe; and the *Arabs* know not how to fight on Foot. And though they bragg'd they had 400 Men, we ſuppoſed 200 might be the moſt, and they not all Lances. But on receipt of this Letter, and the Servants telling us that they would certainly be cut off, if we endeavoured their Reſcue, we began to examin what Moneys we had, Cloaths and other Trade, and found we could not near make up that Sum. In this Confuſion came two *Arabs* to receive the things, and immediately Word was brought that the *Emir* would come and viſit us; we ſent

him Word, that if he came with more than two Followers, we would not admit him: ſo he came with two Servants only; and in concluſion, we made him up in Money and Goods to the Value of 1500 Dollars. He valuing our things as we pleaſed; his Deſign being not ſo much to compleat the Sum, as to take from us all we had. After this, about Sun-Set, he returned us our two Friends, when the *Sheck* of the Town invited us to Lodge within the Town; which we found afterward was with a Deſign to have forced ſomething from us: But we giving him to underſtand that the Emir had taken all already, and had left us only our Arms and the Cloaths on our Backs; which if they would have, they muſt Fight for: That Reſolution daunted them, and away they went, promiſing us Barley for our Horſes in the Morning. We kept good watch in the Night, and when Day broke, we began to conſider how to clear our ſelves; we expected the Barley till Nine in the Morning, when it came, and the Emir himſelf came and gave us the good Morrow: We feared leſt they ſhould pretend to ſtop ſome of us in the Gate-way; ſo we placed ſix of our Company to ſecure the Paſſage, till all the reſt were got out, under pretence of taking an Inſcription that was over the Gate. Being all got clear, we returned by the ſame way we came, and arrived at *Aleppo July* 29. in the Morning. This *Melkam* told us, that if we had not ſubmitted our ſelves to his Demands, he was reſolved to Fight us after this Method: Loading 50 Camels with Baggs of Sand, and

making ſmall holes in the Bags for the Sand to drop out, he would drive theſe Camels abreaſt upon us before the Wind, that the Sand might blow in our Eyes, and we ſpending our Bullets on the Camels, might ſo be eaſily overthrown; we anſwered, that we believed he would not venture his Camels and Horſes to ſuch a Combat. He wondered extreamly when we talk'd of Shooting Birds flying, and Hares running.

This and other the like Violences uſed by this *Arab* Prince, made the *Baſſa* of *Aleppo* reſolve to deſtroy him; and not long after he cajolled him with the Hopes of being made King of the *Arabs*, and to draw him near the City, he veſted and careſſed ſome of his Followers: which having its effect, the *Baſſa* ſurprized him in his Tents by Night, and ſoon after he was put to Death: This thoſe People were willing to believe the effect of their ſo abuſing the *Engliſh*, and might much contribute to the Security and good Uſage they found, that went the ſecond time on this Expedition.

We had not time to view theſe Ruins by reaſon of this Uſage, though perhaps we might with ſafety. We only took one of the Inſcriptions as we paſt by, which was thus.

CЄΠΤΙѠΙΟΝ ΟΥΟΡΟΔΗΝ ΤΟΝ ΚΡΑΤΙCΤΟΝ
ЄΠΙΤΡΟΠΟΝ CЄΒΑCΤΟΥ ΔΟΥΚΗΝΑΡΙΟΝ
ΚΑΙ ΑΡ..ΑΠΗΤΗΝ ΙΟΥΛΙΟC ΑΥΡΗΛΙΟC CΑΝѠΗC
ѠΑCCΙΑΝΟΥ ΤΟΥ Ѡ..ΛЄΝΑΙΟΥ ΙΠΠЄΥC
ΡΟΥѠΑѠΝ ΤΟΝ ΦΙΛΟΝ ΚΙΑ ΠΡΟCΤΑΤΗΝ
ЄΤΟΥCΗΟΦ ΜΗΝЄΙ ΞΑΝΔΙΚѠ.

where-

wherein the principal Difference is in the Word ἀρχαπήτην, which in the Account already publiſhed is read ἀρχαπέτην, which ſeems to ſignify ſome peculiar Officer of the *Syrians*, as *Ducenarius* of the *Latins*, which perhaps thoſe ſkill'd in the Oriental Cuſtoms and Languages may be able to expound.

As far as we could conclude from our Journeys, and the Poſition of the Ways taken by two good Compaſſes, the Diſtance of *Tadmor* from *Aleppo* is about a 150 Engliſh Miles, and the Courſe S. S. E. or rather ſomewhat more Southerly, conſidering the Variation of the Compaſs, which is above half a Point Weſtward in theſe Parts.

The Second Voyage, Anno 1691.

We ſet out from *Aleppo* for *Tadmor* on *Michaelmas-day*, being in all, Maſters and Servants, thirty Men, well armed, having obtained a Promiſe of Security from *Aſſyne*, then King of the *Arabs*, and one of his own People for a Guide. This Day our Road pointed S. by E. and in four Hours we came to a Fountain call'd *Caphir-Abiad*, leaving old *Aleppo* about an Hour diſtant on the right Hand: Here we made but a very ſhort Stay, but proceeded to a better Fountain at the Foot of a very high Hill, cover'd with looſe Stones, the Ruins of a Village called *Broeder*, of which there was not one Houſe remaining; and dining here, we advanced in an Hour and a Quarter more, in the Afternoon, through a fertile open Place, to a Plain called *Emghir*, famous for the beſt Wheat that

is brought to *Aleppo*. This we made our firſt Stage; and mounting again in the Morning about five a Clock, in leſs than an Hour, paſt by an uninhabited Village, call'd *Urghee*, our Road pointing as before, through the fruitful Plain, even and pleaſant; but when we came to aſcend the Hills, where I reckoned we entred the Deſart, and were to take our leave of Mankind, at leaſt of an inhabited Country for ſome Days, we had a troubleſome Paſſage, over looſe great Stones, without any appearance of a Road.

Our Guide had promiſed to conduct us through pleaſant Groves and Foreſts; but no ſuch thing appear'd, unleſs we would beſtow that Name upon low withered Shrubs that grew in the Way, only one Tree we ſaw, which was of good uſe to us, ſerving as a Land-mark; and when we were come up with it, being left at a little Diſtance on the right Hand, we gain'd the Proſpect of a remote ridge of Hills before us and on the top of one of them an old Caſtle; this Caſtle, we were told, was known by the Name of *Gazar Ibn Wordan*; but what it anciently was, or in what Condition it is at preſent, I could not learn; therefore, not unwillingly, I turned my Eyes from it to a little round Hill more on the left, by which we were to direct our Courſe, and about a quarter of an Hour from which ſtood a Sheck's Houſe, call'd *Sheck Ailha*, where we were to bait, with a Well of Water by it, but ſuch, that we had but little *guſto* to taſte, though it ſerved our Horſes: All the Country hereabouts is ſtor'd with *Antelopes*, and there is a barbarous

barbarous ſort of People there, that have hardly any thing elſe to live upon, but what of theſe they can kill; and Neceſſity has taught them to be no mean Artiſts in their way, for they lie down behind the Stones, and as the poor harmleſs Creature paſſes, ſhoot them; and though their Guns be very ordinary, exceeding heavy and thick, with Matck-Locks, yet are they ſuch excellent Marks-men, that they kill many. That Morning we had Travelled about five Hours to reach *Sheck Ailha*'s; yet finding nothing to invite our Stay there, (though there were four or five Tombs there not ill made, according to the *Turkiſh* mode) about one a Clock we mounted again, bending to the S. E. or ſomething more Eaſterly. In our way we had two remarkable Proſpects, one on the right Hand, of the Ruins of an ancient City call'd *Andreen*, and ſometimes *Londrine*, which we were told had been formerly inhabited by *Franks*, and that there were many Inſcriptions there; but was too far out of our way, and withal ſomething too dangerous too, for us to take a view of them: The other, on the left Hand, was another Tree, not far from which our Guide aſſured us of good Water, where we deſigned to take up our Lodging; the hopes of the Water made us ſlight a Well we paſt by on the Road, at which afterwards we repented we had not ſtay'd; for when we came up with the Tree, from which we had declined a great way to the Right, we found our Water ſtill a very great Diſtance; and were conſtrained to take new Directions by a white chalky Hill, almoſt as

far as we could ſee, and yet not much beyond the Place which was to be our Stage; on therefore we proceeded till Sun-ſet, very weary, and almoſt without hope of our coming to Water that Night, though at the ſame time near dead with Thirſt; and which the more ſurpriz'd us, our Guide was advanced a great way before, out of our Sight, upon what Deſign we knew not, but at his return, we found it was only to aſſure himſelf better of the way, and in an Hour's time more he brought us to the Side of a Bog, call'd by the Name of *Zerga*, where, ſuch as it was, we found Water enough, but it was neither palatable nor wholſome, neither did the Ground ſeem proper to ſleep upon; yet we were forced to be content, there being no removing thence that Night.

October 1. We departed from *Zerga*, about two Hours before Sun-riſe, and as ſoon as it was light, had the Proſpect of a very high Hill, which was to be the Bounds of our Travel that Day. To this we made as directly as we could look, finding nothing in our way obſervable either to arreſt our Curioſity, or to ſlacken our Pace, except a Multitude of Holes made in the ſandy Earth, by Rats, Serpents, and other Animals, which render'd our Riding a little troubleſome; as we had found it upon the ſame Account the Afternoon before. About two Hours ſhort of our Stage, we were ſhewn three little round Hills lying to the right in a direct Line, known by the Name of *Tenage*; where we were told there was good Water, and it's for that reaſon only they deſerve the Notice of thoſe that travel through

through ſuch a thirſty Deſart. The Place to which we directed our Courſe was called *Eſree*, where we arrived about eleven a Clock, and found to our great Satisfaction, that our Guide had not deceived us in his Promiſe of excellent Water: Here we could diſcern the Foundations of a ſpacious City, and a Piece of a thick Wall, built of a chalky Stone, was ſtanding: This we judged to be the remainder of a Caſtle ſituated on the Side of the Hill, ſo as both to defend and command the City. On the top of the Hill, above the Caſtle, ſtands the Ruins of a Fabrick, in appearance very ancient, built of very hard Stone, yet exceedingly worn by the Weather; 'tis of an oblong Figure, pointing near to the N. E. and S. W. with only one Door on the Eaſterly end, which was once adorned with extraordinary good Carvings, of which there are ſtill ſome remains, but the greateſt part is either worn away, or purpoſely defaced; and thoſe marks of ancient Beauty that remain are very obſcure, and difficultly diſcernable; the outſide of the Walls is beautified with Pilaſters quite round, with their Pedeſtals and Capitals regular and handſome; but the Roof is all fallen down, and within appears nothing which looks either great or beautiful. The Situation, and placing the Door, hinders one from conjecturing it to have been a Chriſtian Oratory, or Chapel, and therefore in probability it muſt have been a heathen Temple; and if ſo, then the Piece of the Caſtle Wall being of a ſofter Stone, muſt be much more modern; the Goodneſs of the Water brings the

Arabs (who rove up and down the Deſart) and the *Turk-men* frequently hither, which has occaſion'd a great many Graves about the Temple; and ſome have had Leiſure, and, (which is more difficult to be imagin'd) ſkill enough to ſcratch in the Walls the firſt Letters of their Names, and many more in Arabick Characters, which we could make nothing of, no more than of an Arabick Inſcription which lay hard by, but appeared not ancient.

October the 2d. We departed from *Eſree*, about an Hour, or an Hour and an half after Midnight; and in ſix Hours and an half arrived at two Wells, the Water 18 Fathom and two Foot deep, known by the Name of *Imp malcha Giub*: Through the greateſt Part of this Stage we had a broad beaten Road, and where that was not diſcernible, we guided our ſelves by a ridge of chalky Hills, under which the Wells lay; the Water we found exceeding bad, and of ſo noiſom a Scent, that we could not endure it ſo much as at our Noſes; which made our Guide laugh at us, who told us, the *Arabs*, and even the King himſelf uſed to drink freely of it; which, I am ſure, our Horſes would not do, though they were under a Neceſſity of drinking that or none: For our ſelves we had brought from *Eſree* Water, ſufficient for one Day at leaſt. In our way hither we were ſhewn the true Plant which they burn for Soap-Aſhes, which has no Leaves, but a ſoft juicy Stalk ſhooting into ſeveral Branches, and ſomething reſembling our Camphire, only it's more round than that; the Aſhes

likewiſe we ſaw, which were made not far from the Wells, which in burning run into Cakes, not much unlike the Cinders of a Forge, only they are heavier, and not ſo full of Pores, nor ſo hard as they are. In the Afternoon, we proceeded on our Voyage two Hours and an half, to a place called *Almyrrha*, paſſing rather between than over the Hills, though we had ſomething of an aſcent too; this we did to ſhorten our Stage the next Morning, for we were told beforehand we ſhould find no Water upon thoſe Mountains; ſo, for our Selves, we liv'd upon our old Stock, and our Horſes were conſtrain'd to paſs that Night without Water. Our Journey hitherto had been altogether Southerly, and but little varying to the Eaſtward of due South.

October the 3d. We mounted from *Almyrrha* between five and ſix in the Morning, making to the Point of a high ridge of Mountains, through an uneven deſart Way, frequently inturrupted with Gutts and Chanels, probably made by the Deſcent of the Waters from the Hills, upon ſudden Rains: We came to the Aſcent after about four Hours Travel, which we found not difficult; and when we were on the Top, we had a pleaſant Proſpect of the Country, and what we rejoyced at moſt, we were ſhewn a little Hill, juſt behind which, we were told, lay *Tadmor*. this Mountain was cover'd on both Sides with great plenty of Turpentine-Trees, which was an Object very pleaſing, having ſeen very few Greens in our whole Journey: This Tree grows very thick and ſhady, and ſeveral of them

them we ſaw loaded with a vaſt Abundance of ſmall round Nut, the chief Uſe whereof is to make Oil, though ſome eat them, and account them as great a Regalio as Piſtaches; their outward Huſk is green, and more oily than that of Piſtaches, and within a very thin Shell is contained a Kernel both in colour and reliſh very much reſembling them; but thoſe that eat them, ſeldom take the Pains to ſearch for the Kernels, but eat Huſk and Shell all together, which have no ungrateful Taſte: From this Hill we had a tedious deſcent, and coming at the Foot into a narrow Gut, winding this way and that between the Mountains, our Paſſage ſeemed very long, hot and tireſome; our want of Water however obliged us to proceed, whereof we now began to be in great Neceſſity, eſpecially for our Horſes and Mules, who had none the Night before, nor none all that Day; with this we had hopes of being ſupplied two different Ways; having had a ſhower of Rain the Night before, we hoped to have found Water ſtanding in the hollows of the Rocks; but either the Rain had not reach'd ſo far, or not in ſuch plenty as to fill thoſe naturally hewed Ciſterns: Our other expectation was from the Wells that were in the Road; but theſe our Guide advancing before and examining, met us with the unwelcome News, that they were all dried up; and the beſt Advice he could give us, was to pitch where we were, and content our ſelves with the remains of what we had brought two Days in our Veſſels, till our Horſes and Mules might be ſent to a Fountain two Hours out of

of our way, and being watered there themſelves, bring a freſh Supply for us: This way, with ſome Difficulty, we aſſented to, as more eligible, than weary as we were, to wander ſo far out of the Road, to have the ſame Ground to ſtage over again the next Morning: We reſolved therefore to ſend our Guide, with one or two of our Servants, in ſearch of the Water, and afterwards others with our Horſes, while in the mean time we pitch'd our Tents, it being then about two a Clock in the Afternoon: As ſoon as they were gone, a ſmall drizling Rain, which we had about half an Hour, encreaſed to a very plentiful Shower, which put us upon producing all the Veſſels we had to catch it as it fell from the Heavens, or ran down the Skirts of our Tents, our Horſes at the ſame time greedily drinking it from the Ground; but we might have ſpared our Pains, for in leſs than half an Hour's time, our Camp was in a manner a-float, and we were ſurrounded with Water not only ſufficient for us, but for an Army of 20000 Men; thoſe hollow Gutts which we paſſed over without the leaſt appearance of Moiſture, were, by the Cataracts which deſcended from the Mountains, become Rivers; and our Guide with thoſe Servants we had ſent out, that before rode over it dry, it being ſwoln to ſuch a Torrent, were put to ſome difficulty to repaſs it; ſo plentifully was God pleaſed to provide for us in our greateſt Streight; and which encreaſes both the Wonder and Mercy, the next Morning, all this great quantity of Water was paſt away, ſo that in about

about two Hour's Riding we could hardly perceive that there had been any Rain at all. This memorable Place is known by the Name of *Al-Wiſhal.*

October the 4th. From *Al-Wiſhal* we proceeded for *Tadmor*, ſome of the Ruins of which we perſuaded our ſelves, we could ſee the Day before; perhaps it might be the Caſtle, which is more than half an Hour's Diſtance from the City; our way lay Southward, but the Gut in which we travelled would not permit us to keep a direct Courſe: However, in about an Hour's Walk, we paſt by *Antor* Mountains (our Guide call'd them *Toul Antor*) through a Gut or Rent, both Sides of which ſo directly anſwered one to the other, they would tempt a Man to believe, they were ſeparated by Art, for an entrance into the Country; but it muſt have been a Work of prodigious Labour and Charges to have cut through ſuch vaſt Mountains: And if any one was ſo hardy as to attempt it, he certainly grew weary of his Undertaking; for the Ground is levelled but a very little way, and almoſt as ſoon as we were well got within the open Space, we were obliged to aſcend another Hill, and ſo our Road continued over Hills and Valleys interchangeably all the way. On the left Hand, ſome Diſtance from the Road, we ſaw a *Sheck*'s Houſe on the top of a high Hill, which made a better Shew than uſually thoſe Buildings do, but being aſſured by our Guide it was a modern Structure, and eager too to come to the principal Place we aimed at, we would not prolong our Stage ſo much as to turn

turn out of the Road, to ſee more of it: So preſſing ſtill forwards, we had hardly proceeded four Hours, when we came to the Brow of a rocky Mountain, ſeparated from that whereon ſtands the Caſtle of *Tadmor*, but by a narrow Valley: In which Hill, by the Way, appeared ſome Quarries of fine Stone, which probably might afford Materials to the curious Buildings in the City. Our Guide here (according to his accuſtomed Diligence) advanced ſome few Paces before us, and having eſpied three or four Country-Fellows driving Aſſes towards us, he cauſed us to make halt, to give them an Opportunity to come nearer to us, reſolving to ſpeak with them, to know whether the Coaſt was clear; or if any of the Mountain *Arabs* were then at *Tadmor*, or not. After a little Space, with our Arms in our Hands, we marched in as good Order as the Way would permit, down a rocky and ſteep Precipice, into the Valley; and our Guide making greater Speed than we could, gallop'd after the poor affrighted Country-Fellows; who ſeeing ſuch a Company unexpectedly deſcend the Hill, left their Aſſes, and fled towards the City with all poſſible Speed: But they were ſoon overtaken, and brought back again to us; to whom they related the good News, that there was no Force at all in *Tadmor*, and that we might proceed with Courage, and ſee what we would there with all Safety: Which News obtained them their Liberty to go again to their Aſſes, and we continued in our Way.

Having

Having tired our ſelves with roving from Ruin to Ruin, and rummaging among old Stones, from which little Knowledge could be obtained; and more eſpecially not thinking it ſafe to linger too long in a Place, where ſhould the Mountain *Arabs* (who were Enemies to *Aſſyne Abaſſe*, our Friend) have Intelligence of us, they might either fall upon or endeavour to intercept us in our Return; (for which Reaſon alſo we had all along concealed our intended Courſe, under a pretence of proceeding forward to *Damaſcus*.) On *Thurſday*, *October* 8. about half an Hour after four in the Morning, we departed from *Tadmor*, being very well ſatisfied with what we had ſeen, and glad to have eſcaped ſo dreaded a Place, without any Trouble or Pretences upon us; but elſe with ſome Regret, for having left a great many things behind, which deſerved a more particular and curious inſpection. Our Road lay almoſt due Eaſt, or a little inclining to the North; and on the left hand, a Ridge of Hills ſtretched along for a great Space, ſometimes about half an Hour diſtant from the Road, and ſometimes opening wider: Theſe Hills, we were told, were ſtored with rich Veins of divers Minerals, and afforded all that vaſt quantity of Marble, the Remains whereof we had ſeen at *Tadmor*; and it was from a Fountain call'd *Abulfarras*, at the Foot of one of them, they fetch out Water, which we drank there; the Inhabitants contenting themſelves with that which runs from the hot Springs. To the right Hand lay a vaſt barren Plain, perfectly bare, and hardly any thing green to be

ſeen

ſeen therein, except it were a few Gourds which our Servants found on the Side of a little riſing Ground, where there was no Shew of any thing moiſt to feed them. Our Way being plain, we had the Sight of *Tadmor*, eſpecially the Caſtle, for above half our Stage, till we came to an old *Caphar* Houſe. We made indeed a very ſhort Day's Journey, in the whole, finding a Fountain of excellent Water in about five Hours and a half's riding; which, as it was a moſt welcome Refreſhment to us in ſuch a thirſty Deſart, ſo it was the only good Water we met with till we came to *Euphrates*, which was not till the third Day from this Place. At this Fountain we pitch'd, near to which is a Village, but almoſt wholly ruined and deſerted. 'Twas ſome time before any Body would be ſeen, for they were afraid of us; at length, three Men came out to our Tents, Spectacles of a miſerable Poverty, occaſion'd by their being frequently pillaged by the Mountain *Arabs*, and a great Duty they pay to *Aſſyne Abaſſe* their King, for his Protection: Three hundred Dollars they pay him annually, when one would think the whole Village was not able to make up the Sum of one Hundred; yet being the remoteſt Place that was under his Juriſdiction, they often ſuffer by the Inroads of the other. The Name of the Place is *Tarecca*,, a Name it received (as we were inform'd) from a Victory obtained there by the *Turks* over the *Mamalukes*.

October the 9th. From *Tarecca* we mounted early, and travelling N. E. or near that Point, in ſeven Hour's Time arrived at *Souk-*

ney. The Road we found much like what we had the Day before, lying over a barren Plain; only we had Hills on both Sides, and ſometimes cloſing within half an Hour's Riding one of the other. The Village has its Name from the hot Waters, (for ſo the Word imports,) which are of the ſame Nature with thoſe of *Tadmor*; herein they Bath frequently, the ſame little dirty Hole ſerving both for Men and Women; only they have ſo much Modeſty remaining, that they have different Hours for one and the other. To ſay the Truth, 'twas the only Mark of Modeſty I could obſerve among them; in other reſpects they ſeemed a Confident, or rather impudent Generation of People. Before we could pitch our Tents, they flock'd about us in Multitudes, Men, Women, and Children; and of the laſt, many of them as naked as ever they came into the World, not ſo much as a Rag about them to cover them; and ſo numerous they appeared, that if we had reaſon to think *Yarecca* wanted Inhabitants, we had no leſs, to conclude *Soukney* over-ſtock'd. At this Place uſually reſides an Officer of *Aſſyne's*, who is their Sub-Baſha, or Governor: He whom we found there, was call'd *Dor*, of a good Family among the *Arabs*, to whom we made a Preſent; and he civilly return'd it in Barley for our Horſes. Afterwards he came under our Tents, and invited us to an Entertainment; which, conſidering the Circumſtances of the Place, was very ſplendid, though it was nothing but *Pilaw* at laſt, a little diverſifi'd by the Dreſſing; and, to ſpeak truly, I judge we could not

not have leſs than a Buſhel of Rice ſet before us. His Palace, indeed, was not very ſtately, there being few Cottages in *England* but might vie with it. To the Room wherein we were entertain'd, which doubtleſs, was the beſt, if not the only one he had, we were forced to clamber, rather than aſcend, by broken Steps made of Stone and Dirt. When we were got in, and commodiouſly ſeated after the *Turkiſh* Mode, it ſeemed large enough for about a Dozen or Fourteen People: At the upper end was a little ſpace ſeparated from the reſt by a ridge made up of Earth, within which, I ſuppoſe, he ſlept. The Walls were mean, but the Roof much worſe, having no other Covering but Faggots; ſo that certainly it could not be Proof againſt a Shower of Rain which fell that Night, and forced us out of our Tents, into an old ruinous *Cane*, for Shelter: However it ſerved well enough for our Afternoon's Collation; and we had come away with a good Opinion of the Gentleman's Civility, had he not afterwards endeavoured to make a Pretence upon us, and ſo would have forced us to pay dear for our Rice: he pretended to a Cuſtomary Duty of a Chequeen a Head of all *Franks* that paſt that Road; though probably neither he, nor his Grand-father before him, had ever ſeen a *Frank* there before. But when he underſtood by our Guide, that we were not ſo eaſily to be impoſed upon; and withal, that we were *Aſſyne*'s Friends, and in our Way to his Tents; and eſpecially our Treaſurer a Perſon he very much eſteemed, who therefore would be ſure

to acquaint him with any Exaction or Injury offer'd us, his Mouth was quickly ſtop'd, and he grew ſo ſenſible of his Error, that he ſent to excuſe it, and preſented our Treaſurer with a Fan of Black Oſtrich Feathers; and not only ſo, but in the morning came himſelf, and begging pardon, deſired nothing might be ſaid of what had paſt, and ſo conducted us about an Hour on our way. This Village pays to *Aſſyne* fifteen hundred Dollars *per Annum.*

October the 10th. Continuing our Voyage ſtill to the N. E. or ſomething more Eaſterly, we found it another pleaſant and eaſie Stage to another Village call'd *Tiebe*, ſo called (as they ſay) from the goodneſs of the Water, the Word ſignifying *good:* But we found them not ſo over excellent; they had the Taſt and were doubtleſs tinctured with the ſame Mineral, with thoſe of *Soukney* and *Tadmor*, though not ſo ſtrong. But the Village it ſelf made a better Shew than uſual; and the People appear'd of ſomething better Faſhion, and more civiliz'd, than thoſe we had left. It's pleaſantly ſituated, and makes a good appearance as one comes up to it; the Proſpect being helped by a well built Steeple, to which is now adjoined their Moſch: But I am apt to believe it the remains of a Chriſtian Church, being built with more Art and Beauty than you ſhall eaſiy find in Turkiſh Fabricks: And there are alſo ſeveral Ruins about it, which ſpeak it to have been a more famous Place than now it is. Into the Moſch we were permitted to enter, without any Diſturbance. This Village lies in one of the Roads

Roads from *Aleppo* to *Bagdatt*, and pays to *Aſſyne* an annual Tribute of one thouſand Dollars. From hence we mounted again in the Afternoon, and proceeded about two Hours and a half farther, to ſhorten our next Day's Stage. Having travelled this Day, in all, about ſeven or eight Hours, the Place we pitch'd at was a Fountain, and known by the name of *Alcome*; but neither Town nor Houſe by it: neither was the Water fit to be drank, being of the ſame nature with that of *Souknep*, and almoſt as warm.

October the 11th. From *Alcome* we roſe about an Hour and an half after Midnight, our Guide groping out the way, by the help of the Stars, which now bended more to the North than formerly. As ſoon as it was light enough to look about us, we found our ſelves in a wild open Deſart, the Ground, in ſome places covered with a ſort of Heath, and in others quite bare. Nor had we travelled long after the Sun was up, before, by the help of a riſing Ground, we diſcovered *Arſoffa*, the Place whither we were tending, which gave us hopes we ſhould quickly be there: But having a dry tireſome Plain to traverſe, and the hot Sun cauſing our Mules a little to ſlacken their pace, 'twas after ten a Clock before we reached it: And which was more vexatious ſtill, finding no Water any where near, we were neceſſitated to proceed forward for the River *Euphrates*, which we found four Hours diſtance from hence. *Arſoffa*, or (as the *Arabs* call it) *Arſoffa Emir*, ſeems to be the remains of a Monaſtery, having no Town nor Village near it, and being

one continued Pile of Building of an oblong Figure, ſtretching long ways Eaſt and Weſt, and encloſing a very capacious Area: At a diſtance it makes a glittering ſhew, being built of *Gypſine Stone*, or Rock-Iſing-glais reſembling Alabaſter, but not ſo hard; ſeveral Quarries of which we paſt by in our way to it. When the Sun ſhines upon it, it reflects the Beams ſo ſtrong, that they dazzle the Eyes of the Spectators. Art or Accuracy in the Workmanſhip we found none; and but very little carved Work, and that mean enough; nay, the very Cement they made uſe of, is but little better than Dirt; ſo that it's no great Wonder to ſee it in Ruins, though it has not the appearance of any great Antiquity. Round about were the little Apartments or Chambers for the Monks, built Arch-wiſe, only one Story above Ground; but underneath are ſeveral Cells or Vaults, larger than the Chambers, which perhaps might ſerve for their Schools, or Working-houſes. In the midſt of the Area ſtand the Ruins of ſeveral Buildings, ſome of which ſeem to have been Ciſterns for Water, and it may be the Bathing-places: But the moſt remarkable was one, which probably was the Abbot's or Biſhop's Houſe, there having been ſomething more Pains beſtow'd upon it, than the reſt: And another, which was the Relicks of their Church. This was formerly no unhandſome Structure, being built in the form of our Churches, and diſtinguiſh'd into three Iſles, of which the middle one is ſupported by eighteen turned Marble Pillars, with Capitals upon them, not of Mar-

Marble, but of a ſort of Clay, and caſt into the ſhape they are in, but of a Colour exactly reſembling the Pillar it ſelf. That which perſuades to believe them caſt, is a Greek Inſcription to be ſeen on all of them; the Letters whereof are not made by Inciſion in the Stone, but ſeem to be ſtamped, ſtanding out higher than the diſtance between them; and on one of them, by miſtake, they are ſo placed, as to be read after the Oriental manner, from the right hand to the left. The Words are theſe, with the Crucifix before, as follows:

✠ ΕΠΙ ΣΕΡΓΙΟΥ ΕΠΙΣΚ°. ΤΟΥ ΣΤΝΓΕΝ ΜΑΡΩΝΙΟΥ ΤΟΥ ΧΩΡΕΠΙΣΚ°.

From hence our Guide led us to the River by the aſſiſtance of two little Hills, which are known by the Name of *Aff Dieu*, our way lying North, and a little bending to the Eaſt. The Sight of the River was a very pleaſing Proſpect, and to our great Comfort, we found the Water very clear, happening to be there before the Rains, and after the Snow-Waters (which ſwell and diſturb it in the Summer-time) were all paſt: And our Happineſs ſeemed the greater, having had ſo tedious and thirſty a Journey of at leaſt fourteen Hours, and neither our Selves nor our Horſes touch'd a drop of Water all Day. We pitch'd upon a Reach of the River, where it was not very broad, not being above half a Muſket-Shot over.

October the 12th. This Morning, about Sun-riſe, we proceeded on our Voyage, keeping along the Banks of the River, which, for the moſt part, led us Weſt and North-Weſt: And here we had pleaſant travelling, having the River on the right Hand, and Hills of Marble or other fine Stone, on the left; and delightful Groves of Tamariſk, Mulberry, and other Trees to paſs through. Here every thing about us lookt freſh and verdant, and we met frequently Men and Women paſſing on their Occaſions, a thing to which (in our former Stages) we had not been accuſtomed. We had alſo a pleaſing Proſpect of the oppoſite Shore, and could ſee a great Way into *Meſopotamia*, but could meet with no Convenience to croſs the River, which we were very deſirous to have done. There are no Places of Note remaining upon the River either on one ſide or the other; only on the farther ſide we ſaw an old Caſtle call'd *Giabar*, which made a good ſhew, being ſituated on the top of a Hill, and both for that and the way of building, very much reſembling that of *Aleppo*, only that is the larger, and in the midſt of a City; this leſs and has neither Town nor Houſes about it. On our Side we paſt by a *Sheck*'s Houſe call'd *Abul-Rarra*, and the Ruins of a Town a little farther, where there was a ſquare Tower built of a very ordinary Brick, but pretty entire. After we had left theſe Ruins, we reſted to bait, under the ſhadow of a Rock wherein were many Apartments and Conveniences cut to lodge in, which I ſuppoſe are made uſe of in the Winter by the People, who,

who, during the Summer, pitch among the Trees by the River-ſide. In the Afternoon we continued our Journey as before, keeping always at a little diſtance from the River, till a little before Sun-ſet; when we came to a very convenient Place upon the Banks, where we took up our Lodging for that Night, having travell'd between ſeven or eight Hours the whole Day.

October the 13th. This Day we had the ſame Satisfaction as the Day before, proceeding as near the River as the Road would permit; and having made a Stage of about ſix Hours, we reſted under the ſhade of the Tamariſk Trees by the River ſide, hoping to have found Conveniency to have croſt it, but we could not. In our Way we ſaw nothing obſervable but the Ruins of a City call'd *Baulas*, where the *Turks* had formerly a *Sangiack*; but now there is never an Inhabitant in the place, nor Houſe ſtanding, but the Ruins of Houſes, and an Octagonal Tower of a conſiderable Height, *viz.* One Hundred and ſeven Steps, and beautified on the outſide with Flouriſhes and an Arabick Inſcription round about: It's a handſome Structure, and probably the Work of the *Mamalukes*, ſince whoſe time little has been done to adorn, but abundance to deſtroy and waſte this Country. After Dinner, we mounted ſooner than ordinary; becauſe hoping to reach the Tents of *Aſſyne*, we were unwilling it ſhould be late when we arrived: yet we made it near Sun-ſet before we got to *Fay*, a Fountain by which he lay. We had travell'd ſtill on the ſame Point N. W. with

the Proſpect of the River the greater part of the Way; the neareſt Reach thereof not being above an Hour's riding from the Fountain. On the Road we met with ſeveral *Bandera's* of the *Emir*'s Soldiers, who knowing our Guide, and underſtanding we were going to him, gave us a very courteous *Salam*, who elſe, perhaps, might have treated us with another ſort of Civility. The King's Tents ſpread over a large Plain, and took up ſo vaſt a Space, that though we had the Advantage of a riſing Ground, we could not ſee the uttermoſt extent of them. His own particular Tent was pretty near the middle of the reſt, which were pitch'd about it, not in a circular manner, but ſtretching out in length as the Plain open'd, or for the better Conveniency of a Current of Water, which from the Fountain ran through the midſt of them. 'Twas not at all diſtinguiſhed from the reſt, but by its bigneſs, and a little more Company about it, being all made of a ſort of Hair-Cloth, which ſeemed hardly a Defence againſt Rain or Sun: But certainly they muſt find otherwiſe, elſe their Neceſſity (they ſpending their Lives in ſuch moveable Habitations) would have taught them to have contrived ſomething better. It cannot well be doubted but they are deſcended from the old *Arabs Scenitæ*, they living juſt after the ſame manner, having no ſettled Abode, but remove from Fountain to Fountain, as they find Graſs for their Sheep and Camels, and Water for them and themſelves. They love to derive themſelves from *Iſmael* the Son of *Abraham*; and it may be they are deſcended from

from him, but I believe they would be hard put to't to prove their Pedigree.

As ſoon as we alighted, we were attended by the Officers of the *Emir*, and conducted to a very noble Tent built after the *Turkiſh* Mode, and pitch'd next to his own. Hither he ſent to bid us welcome, and to enquire how we had paſt in our Voyage; and preſently after we had a Repaſt of ſeveral Diſhes of Meat ſet before us, to ſtay our Appetites till a more plentiful Supper could be got ready. But before Supper the King himſelf made us a Viſit in Perſon, bidding us Welcome to *Fay*, and aſking what we had ſeen in our Travels that pleaſed us? how we liked *Tadmor?* and whether we had found a Treaſure there? For this Notion ſticks in the Heads of theſe people, That the *Franks* go to ſee old Ruins, only becauſe they there meet with Inſcriptions which direct them to ſome hid Treaſures. And therefore it's no unuſual thing with them, when they find a Stone with an Inſcription on one ſide, to turn that down to the Ground, that it might not be ſeen or read of any. But we aſſur'd him we went with no ſuch Expectations, but only out of a deſire to ſee the Place: Neither had we brought any thing away with us, but a piece of Porphyry Stone, which upon his Requeſt, we ſhewed him. We let him ſee too, a kind of rude Draught which we had taken of the Place; which we ſeemed to like. He made his Viſit the ſhorter, that he might not incommode us after our Journey; but deſir'd us we would live after our own Pleaſure and to our Satisfaction, and command freely

whatever the Camp would afford; ordering ſome of his People conſtantly to attend upon us. When there was mention made of our Deſign to be gone the next Morning, he answer'd, It muſt not be; himſelf was invited the next Day, to a great Entertainment, by one of his *Grandees*, and we ſhould accompany him: But the Day following, he would go out with us, and hunt part of our Way towards *Aleppo*. When Supper was brought in, there was Victuals enough for three times our Number: A large Diſh of *Pilaw* in the middle, and twelve or fifteen Diſhes of ſeveral Sorts of Meat about it, all dreſs'd after their manner, but exceeding good, and ſuch as one might have fed heartily upon, had he not ſpoil'd his Appetite before. After we had eat and drank what we pleas'd, we roſe up, and our Servants ſat down in our Places; it being the Cuſtom of the *Arabs*, and *Turks* too, from the higheſt to the meaneſt, all to eat at the ſame Table: The beſt ſort ſit down firſt, and ſo in order till all are ſatisfy'd, and then what remains is carry'd away. We might, if we had pleaſed, have lodg'd under the ſame Tent where we eat; but having Tents of our own pitch'd, ſome of our Company choſe rather to retire thither, to avoid being diſturbed by too many Viſitants.

October the 14th. The next Morning, about ten a Clock, we were told that the King was gone to the Entertainment, and expected we ſhould follow him: and that two young Camels were kill'd, to furniſh this ſumptuous Feaſt; which is the higheſt piece of

of Magnificence and Greatneſs to which theſe People, whoſe greateſt Riches conſiſt in Camels, can arrive. The Tent was about a Furlong from ours; ſo mounting our Horſes, we rode to it, and found it ſurrounded with a numerous Train of Gueſts, three hundred at leaſt, of different Sort and Quality: It was very large of it ſelf, and to be ſtill more capacious, 'twas left open toward the Weſt. The King was ſeated at the North-end, about the 'midſt of the Tent, upon a Place raiſed with Cuſhions and Quilts, and Carpets before him: Neither did he ſit croſs-legg'd, as all the reſt of the Company were obliged to do, but in a leaning poſture. They ſeemed to obſerve an exact Order in their Places; and when any Perſon of Note enter'd, thoſe that were near his Place, roſe up and ſtood till he had ſeated himſelf. But the far greateſt part could not come within the compaſs of the Ring, but ſtood behind the Backs of the reſt, leaving a ſpacious *Area* vacant in the middle. When we entred, they made room for us on the King's left Hand, which here is eſteem'd the more honourable; where we ſat down in the ſame poſture with thoſe about us, croſs-legg'd upon a thin Carpet. Before mid-day, a Carpet being ſpread in the middle of the Tent, our Dinner was brought in, being ſerved up in large wooden Bowls between two Men; and truly to my apprehenſion, Load enough for them. Of theſe great Platters there were about fifty or ſixty in number, perhaps more, with a great many little ones, I mean ſuch as one Man was able to bring in, ſtrew-

ed

ed here and there among them, and placed for a Border or Garniſh round about the Table. In the middle of all was one of a larger ſize than all the reſt, in which was the Camel's Bones, and a thin Broth in which they were Boiled: The other greater ones ſeemed all filled with one and the ſame ſort of Proviſion, a kind of Plumb-Broth, made of Rice, and the fleſhy part of a Camel, with Currans and Spices, being of ſomething a darker Colour than what is made in our Country. The leſſer were, for the moſt part, charged with Rice dreſs'd after ſeveral Modes, ſome of them having *Leben*, (a thick ſour Milk) poured upon them. *Leben* is a thing in mighty Eſteem in theſe hot Countries, being very uſeful to quench Thirſt: And truly we had need of it here; for I did not ſee a drop of any ſort of Liquor, excepting a Diſh of Coffee before Dinner, drank at this ſplendid Feaſt. Knives, Forks, Spoons, Trenchers, *&c.* are ſilly impertinent Things in the Eſteem of the *Arabs:* However, we being known to make uſe of ſuch things, had large wooden Spoons laid before us. When the Table was thus plentifully furniſh'd, the King ariſing from his Seat, went and ſat down to that Diſh that was directly before him; and ſo did the reſt, as many as it would contain, which could not be much ſhort of a hundred; and ſo without further Ceremony, they fell to thruſting their Hands into the Diſhes, and eating by Handfuls: Neither was there any occaſion of carving; only becauſe thoſe Diſhes in the middle were to remote too

be

be reach'd, there was an Officer on purpoſe, who ſtepping in among them, and ſtanding in the Spaces deſignedly left for that end, with a long Ladle in both his Hands, helpt any one according to their Deſire. When the King had eaten what he thought fit, he roſe up and waſh'd, and retir'd back to his former Seat, and we alſo did the like; others being ready to fill our Places. Nor did we continue much longer under the Tent in that numerous Croud; for *Aſſyne* perceiving us a little uneaſie, and ſuppoſing we had now ſufficiently ſatisfy'd our Curioſity, though perhaps not our Appetites, told us we might take our Liberty, and if we thought fit to retire to our Tents. This Favour we gladly accepted, and without Ceremony returned, ſeveral of his Attendants waiting upon us back. Here we had another Dinner ſet before us; and having ſome of our own Wine and Water to drink with it, it went down bettter with us than the famous Camel-Feaſt. In the Evening, the King mounted to ſee the flight of a new Hawk, and ſtay'd abroad very late, his Hawk flying away: But ſhe was afterwards taken up by his Falconer; otherwiſe he had not been in a good Humour all that Night, being a Man that delights very much in Sport. After his return from hawking, we went to wait upon him at his own Tent, to return him Thanks for his moſt courteous and royal Reception of us, and to deſire leave to depart the next Morning. Here we found him ſurrounded with the chiefeſt of his People; and being placed

ced again on his left Hand, he entertain'd us with a great deal of pleaſant Diſcourſe: and aſk'd ſuch Queſtions, as ſhew'd him to be a Man of extraordinary Capacity and Judgment. As for Learning, they have no ſuch thing among them, and therefore it's not to be expected that he ſhould be a Scholar: But were he not a Perſon of more than common Prudence and Underſtanding, he could never have managed that wild and unruly people as he has done, ever ſince his Advancement to the Throne; which muſt therefore have been the more difficult, becauſe as he came to it by the Depoſition of his Father (though not immediately) who now lives with him as a private Man, ſo has he never wanted Competitors. To his Father he pays a great deal of outward Reſpect, but is forced to keep a very watchful Eye over him. After about an Hour's Diſcourſe, we were diſmiſs'd.

October the 15th. In the Morning, *Aſſyne* not being at Leiſure to go a hunting, we proceeded on our Voyage homewards with a gread deal of Alacrity; and finding nothing remarkable in our Road, in about three Hours and an half arrived at *Seray*. And hence, after a ſhort Repaſt, we continued our Journey to *Sherby* Fountain, which took us up about the like ſpace of Time. Here we accounted our ſelves as good as at home, being at a Place with which we were well acquainted, and to which ſeveral times in the Year ſome or other of our Nation uſually reſort, either for Antelope or Hog-hunting, according to their Seaſon; nor had

we hence above ſeven or eight Hours to *Aleppo*.

October the 16th. Getting up pretty early in the Morning, we reſolved to hunt the greateſt part of our Way home, as we did; and dining at the famous *Round-Hill*, whereon has been ſpent by the *Engliſh* more Money than would purchaſe a noble Eſtate round about it, in the Afternoon we arrivde ſafe at *Aleppo*.

Some

Some Account of the Ancient State of the City of Palmyra, *with ſhort Remarks upon the Inſcriptions found there.* By E. Halley.

THE City of *Tadmor*, whoſe Remains in Ruins do with ſo much evidence demonſtrate the once happy Condition thereof, ſeems very well to be proved to be the ſame City which *Solomon* the great King of *Iſrael* is ſaid to have founded under that Name in the *Deſart*, both in 1 *Kings* ix. 18. and 2 *Chron.* viii. 16. in the Tranſlation of which, the *Vulgar Latin Verſion*, ſaid to be that of St. *Jerom*, has it, *Condidit Palmyram in Deſerto.* And *Joſephus* (in *lib.* 8. *Antiq. Jud.* wherein he treats of *Solomon* and his Acts) tells us, that he built a City in the Deſart, and called it *Thadamora*; and the *Syrians* at this Day (ſays he) call it by the ſame Name; but the *Greeks* name it *Palmyra*. The Name is therefore Greek, and conſequently has no relation to the Latin *Palma*, and ſeems rather derived from Παλμυός or Πάλμυς, which *Heſychius* interprets Βασιλεὺς πατὴρ: or perhaps from Παλμύτης, which (according to the ſame Author) was an *Egyptian* God. Neither is the Word תדמר but תמר that in Hebrew ſignifies a *Palm-Tree.*

Hi-

Hiſtory is ſilent as to the Fate and Circumſtances of this City, during the great Revolutions in the ſeveral Empires of the Eaſt; but it may well be ſuppoſed, that ſo advanced a Garriſon as this was, being above three hundred Miles from *Jeruſalem*, continued not long in the Poſſeſſion of the *Jews*, who immediately after *Solomon*, fell into civil Diſſention, and divided their Force: So that it is not to be doubted, but that it ſubmitted to the *Babylonian* and *Perſian* Monarchies, and afterwards to the *Macedonians* under *Alexander* and the *Selucidæ*. But when the *Romans* got Footing into theſe Parts, and the *Parthians* ſeemed to put a Stop to their farther Conqueſt in the *Eaſt*, then was this City of *Palmyra*, by reaſon of its Situation, being a Frontier, and in the midſt of a vaſt ſandy *Deſart*, where Armies could not well ſubſiſt to reduce it by Force, courted and careſſed by the contending Princes, and permitted to continue a free State, a Mart or Staple for Trade, for the Convenience of both Empires, as is abundantly made out from the Words of *Appian* and *Pliny*.

Appian (*lib. 5. de Bellis Civil.*) tells us, that *M. Antonius*, after his Victory at *Philippi*, about forty Years before *Chriſt*, ſent his Horſe to plunder the City of *Palmyra*, pretending only that they were not ſufficiently in the *Roman* Intereſt. ὅτι Ρωμαίων μὲν Παρθυαίων ὄντες ἐφοίτων ἐς ἑκατέρας ἐμπολῆς εἶχον, and that being Merchants, they conveyed the *Indian* and *Arabian* Commodities by the way of *Perſia* into the *Roman* Territories; though the true Reaſon were their Riches: But the *Palmyrenes*

being informed of the Deſign, took care to prevent them, and ſo eſcaped plunder: And this Attempt of *Antony*'s occaſioned a Rupture between the two Empires. The Words of *Pliny* (*lib. 5. Nat. Hiſt.*) above an hundred Years after, do likewiſe teſtify that this City then continued in the ſame Enjoyment of their Liberties. They being very much to the Purpoſe, I thought fit to copy them: *Palmyra Urbs nobilis ſitu, divitiis ſoli atque aquis amænis, vaſto undique ambitu arenis includit agros, ac velut terris exempta à rerum Natura; privata ſorte inter duo imperia ſumma Romanorum Parthorumque, & prima in diſcordia ſemper utrinque cura.* Whereby it appears not only that it was a Common-wealth in the Time of *Veſpaſian*; but the Situation thereof is truly deſcribed, as it were an Iſland of fertile Land, ſurrounded with a Sea of barren Sands. Such Spots *Strabo* tells us were frequent in *Lybia*, and by the *Egyptians* were called *Abaſes*; whence poſſibly the Name of the *Abaſſyne* Nation is derived.

With theſe Advantages of Freedom, Neutrality and Trade, for near two Centuries, 'tis not ſtrange that it acquired the State and Wealth anſwerable to the Magnificence of theſe noble Structures. But when the *Romans* under *Trajan* had made it appear, that there was no Compariſon between the Puiſſance of the *Parthians* and them, (*Trajan* having taken *Babylon* and *Cteſiphon* the then Seat of the *Parthian* Empire) the *Palmyreni* were at length determined to declare for the *Romans*; which they did, by ſubmitting themſelves to the Emperor *Adrian*, about the

the Year of Chriſt 130, when *Adrian* made his Progreſs through *Syria* into *Egypt*. And that magnificent Emperor being highly delighted with the native Strength and Situation of the Place, was pleaſed to adorn and rebuild it: When, as 'tis likely, he beſtowed on it the Privileges of a Colony *Juris Italici*, which it enjoyed (as *Ulpian* aſſures us.) And the Inhabitants of the City, in Gratitude, were willing to call themſelves *Hadrianopolitæ*, ἐπικτισθέντος τῆ πόλεως ὑπὸ τοῦ Αὐτοκράτορος (ſays *Stephanus*.) Nor is it unlikely that many of thoſe Marble Pillars were the Gift of that Emperor, and particularly thoſe of the long *Porticus*; for that none of the Inſcriptions are before that Date. And it was uſual for the *Cæſars* to preſent Cities that had obliged them; with Marble Pillars to adorn their publick Buildings. Theſe here were not far to fetch, the neighbouring Mountains affording *Marble-Quarries*: But the Magnitude of the *Porphyry* Columns is indeed very remarkable, conſidering how far thoſe vaſt Stones muſt have been brought by Land-carriage to this Place; it being not known that any other Quarries yield it, except thoſe of *Egypt*, which lie about mid-way between *Cairo* and *Siena*, between the *Nile* and the *Red-Sea*: The Stone being very valuable for its Colour and Hardneſs, and ſo that it riſes in Blocks of any magnitude required; *Quantiſlibet molibus cædendis ſufficiunt Lapidicinæ*, (*Plin. lib.* 36.) And it is a great Miſtake of thoſe who ſuppoſe it fictitious.

From the Time of *Adrian* to that of *Aurelian*, for about an hundred and forty Years,

Place. Which *Aurelian* underſtanding, tho' by this Time he was gotten into *Europe*, with his uſual Fierceneſs, ſpeedily returned; and collecting a ſufficient Army by the Way, he again took the City without any great Oppoſition, and put it to the Sword, with an uncommon Cruelty, (as he himſelf confeſſes in a Letter extant in *Vopiſcus*,) and delivered them to the Pillage of his Soldiers. And it is obſervable, that none of the *Greek* Inſcriptions are after the Date of this Calamity, which befel the City in or about the Year of *Chriſt* 272, as far as may be collected, after it had been nine or ten Years the Seat of the Empire of the Eaſt, not without Glory.

In this appears alſo the great Utility of Coins to illuſtrate Matters of Hiſtory; for by them alone 'tis made out, that there was ſuch a Prince as *Waballathus*, *Vopiſcus* ſingly mentioning him by the Name of *Balbatus*: And from the ſame Coins it appears, that *Odænathus* had the Title of *Auguſtus* four Years, and *Waballathus* ſix at leaſt; and that the firſt Year of *Aurelian* was the fourth of *Waballathus*. And by the Teſtimony of *Pollio*, *Odænathus* was declar'd Emperor of the Eaſt, *Gallieno* & *Saturnino Coſſ.* which was *Anno Chriſti* 263, and died before *Gallienus*, but in the ſame Year, *viz. Anno* 267, which, by the Coins, was the firſt of *Waballathus*. He therefore immediately ſucceeded *Odænathus*, and was without doubt his eldeſt Son by *Zenobia*, and not his Grandſon the Son of *Herodes*, as ſome learned Men have ſuppoſed: For if *Zenobia* could not endure that *Herodes*

Son

Son of *Odænathus* by a former Wife, ſhould ſucceed his Father in prejudice to her Children, and for that Reaſon was conſenting to his Murther (as *Pollio* intimates in *Herodes* and *Mæonius*,) much leſs would ſhe endure the Title of *Auguſtus* in the Son of *Herodes*, eſpecially when her own Sons were, as 'tis probable, elder than ſuch Grandſon. So that 'tis moſt likely that *Herennianus* and *Timolaus*, whom *Pollio* reckons among his XXX Tyrants, might be the younger Sons of *Zenobia*, on whom alſo, out of motherly Affection, ſhe might beſtow the ſame Titles of Honour.

But it muſt be obſerved, that in the *Greek* Coins, this Prince's Name is uſually written ΑΤΤ. ЄΡΜΙΑC ΟΤΑΒΑΛΛΑΘΟC ΑΘΗΝΟΤ (as *Triſtan* ſays he found it upon ſeveral Medals,) but *Patin* has the laſt Word only ΑΘΗ. I ſhould be glad to peruſe ſome of theſe curious Coins, eſpecially if found in or near *Palmyra*: But I am inclinable to believe that his true Name was *Æranes Waballathus* (as was one of his Progenitors, in Inſcription *Pag.* 91.) though perhaps the remoter Cities of *Aſia* and *Ionia* might by miſtake write it *Hermias*. And 'tis probable that ΑΘΗΝ might be for the firſt Letters of the Name of ΟΔΗΝΑΘΟC, which in *Syriack* begun with an *Aleph*, and the Δ was with thoſe People uſed inſtead of Θ, as we ſee the Month *Xanthicus*, written Ξανδικὸς in many of theſe Inſcriptions, which doubtleſs was pronounced like D *blæſum* or the *Saxon* D.

Though this City were at that Time ſo roughly treated by *Aurelian*, yet it is certain

that he did not burn it, or deſtroy the Buildings thereof: And though *Zoſimus*, on this Occaſion, uſes the Words τὴν πόλιν κατασκάψας, yet that ſeems only to relate to his demoliſhing the Walls and Defences of the Place; and that Emperor's own Letter extant in *Vopiſcus*, doth ſufficiently ſhew that he ſpared the City it ſelf, and that he took Care to re-inſtate the beautiful Temple of the *Sun* that was there, which had been plundered by his Soldiers. However, the Damage then ſuſtained was never retrieved by the Inhabitants, and I do not find that ever this City made any Figure in Hiſtory after it: Yet the *Latin Inſcription*, (Pag. 106.) ſeems to intimate, as if *Diocleſian* had reſtored their Walls within thirty Years after. About the Year of Chriſt 400, it was the head Quarters of the *Legio prima Illyricorum*; and though *Stephanus* gives it no better Title than φρούριον, yet it appears to have been an Archbiſhop's See, under the Metropolitan of *Damaſcus*. To ſay in what Age, or from what Hand it received its final Overthrow, which reduced it to the miſerable Condition it now appears in, there is no light in any of our Hiſtorians; but it is probable it periſh'd long ſince, in the obſcure Ages of the World, during the Wars of the *Saracen* Empire; and being burnt and deſolated, it was never rebuilt; which occaſions the Ruins to lie ſo entire, in a Manner as they were left, neither being uſed to other Structures on the Place, nor worth carrying away, becauſe of the great Diſtance thereof from any other City.

As

As to the Geographical Sight of *Palmyra*, *Ptolomy* places it in the Latitude of *Tripoly* on the Coaſt of *Syria*, and four Degrees more Eaſterly, *viz.*

Παλμύρα . ϙα, ς'. λσ'.

and he makes it the Capital of ſixteen Cities in *Syria Palmyrena*, whereof *Alalis*, *Danaba* and *Evaria* were afterwards *Biſhops Sees*. *Pliny* places it CCIII Miles from the neareſt Coaſt of *Syria*, and CCCXXXVII from *Seleucia ad Tygrim* near *Bagdat*, (which Numbers are erroneouſly printed 252 and 537 in moſt Editions, contrary to the Authority of the MSS.) *Joſephus* places it one Day's Journey from *Euphrates*, and ſix from *Babylon*; which muſt be underſtood of Horſe-man's Journeys of about ſixty Miles *per diem*, it being more than ſo much from this City to *Euphrates*. *Ptolomy* alſo mentions a River running by *Palmyra*, which did not appear to our Travellers, unleſs that Gut or Channel wherein they were overflowed by the Rain-Waters, were the Bed thereof; which may, poſſibly, run with a conſtant Stream in the Winter or times of much Rain: But this (as the Rivers of *Aleppo* and *Damaſcus* at this Day) is made by *Ptolomy* to have no *exit*; but to go off in *Vapour*, and to be imbibed by the thirſty Earth of theſe Deſarts.

The *Æra* or Accompt of Years obſerved by the *Palmyreni* in theſe Inſcriptions, is evidently that of *Seleucus*, call'd afterwards *Dhilcarnian* or *Bicornis* by the *Arabians*, and by them kept in uſe till above 900 Years of Chriſt

Chriſt (as appears by the Obſervations of *Albatani*, publiſhed in *Numb.* 204 of the *Philoſoph. Tranſact.*) and not that of the Death of *Alexander*. This may be demonſtrated from the Inſcription (*Pag.* 101.) wherein *Alexander Severus* is ſtiled ΘΕΟC; that is, after the Death and Conſecration of that Emperor, or after the Year of our Lord 234; and from the Name of *Julius*, who, when this Inſcription was put up, was *Præfectus Prætorio*, (and could be no other than *Julius Philippus Arabs*, who might be eſteemed by the *Palmyreni* as their Country-man,) it follows, that it was in the laſt Year of *Gordian Anno Chriſti* 242 or 243: And that Emperor being ſoon after murder'd by the Treachery of this *Philip*, who ſucceeded him: and his Treaſon coming afterwards to light, 'tis not ſtrange that his Name was purpoſely effaced in this Inſcription. The Date thereof, *Anno* 554, ſhews the Beginning of this Accompt 311 or 312 Years before Chriſt, co-incident with the *Æra* of *Seleucus*, which was likewiſe obſerved by ſeveral other Cities in the Eaſt.

I ſhall not undertake the Part of a Critick on theſe Inſcriptions, but chuſe rather to leave them to the more profeſſedly ſkilful in that Part of Learning, and ſhall only make ſome few Remarks on them, ſuch as occurred whilſt they paſs'd through my Hands.

1. That the more ancient of theſe Inſcriptions dated before the Year 500, do no where make uſe of *Roman Prænomina*, which yet are very frequent in them that follow; particularly *Julius*, *Aurelius* and *Sertimius*, taken up by theſe People out of Reſpect to the Emperors

Emperors that bore thoſe Names; and conſequently that *Septimius Odænathus* (the Inſcription of whoſe Tomb we have, *pag.* 91.) was moſt probably the ſame who was afterwards *Auguſtus*. That Name growing in uſe in the Reign of *Septimius Severus*, under whom or his Son *Caracalla* this *Odænathus* was certainly born. And this Monument being erected by him whilſt he was yet a private Man; and he afterwards attaining the Imperial Dignity, it was neceſſary the Inſcription of his Tomb (which perhaps was that ſingle one that was all of Marble) ſhould be changed: Upon which Occaſion this Stone might be brought back into the Town, and after its Deſtruction, be clapt up caſually over the little Gate-way where now it ſtands.

2. *Pag.* 100. ΚΑΤΕΛΘΟΝΤΕC ΕΙC ΟΛΟΓΕCΙΑΔΑ ΕΜΠΟΡΟΙΑΝ ΕCΤΗCΑΝ: *Deſcendentes Vologeſiada Commercium ſtabiliverunt, Anno* 558, *ſive Anno Chriſti* 247. Whereby it appears, that this People having had their Trade interrupted by the Wars between the *Romans* and the *Perſians*, under *Gordian*, did now ſend an Embaſſy to the Court of *Sapores* King of the *Perſians*, to get it re-eſtabliſhed; which ſucceeded according to their Deſires. *Vologeſias* was a City built by *Vologeſes* King of the *Parthians* in the Time of *Nero*, on the *Euphrates* below *Babylon*. *Ptolomy* calls it Ὀλογεσίας; *Stephanus*, Βολογεσίας; *Ammianus*, *Vologeſſia*; and *Pliny* lib. 6. *Vologeſocerta*.

3. *Pag.* 101. ΚΑΙ ΟΥΚΟΝΙCΩΝΑ ΦΕΙΔΗCΑΝΤΑ ΧΡΗΜΑΤΩΝ. I ſubmit it to the Judg-

ment of the Criticks, whether this faulty Place may not be amended, by reading it ΟΥΚ ΟΙΚΕΙΩΝ ΑΦΕΙΔΗCΑΝΤΑ, *&c.* as likewiſe whether ΔΙCΜΑΛΚΟΥ in the ſame Inſcription may not be inſtead of ΜΑΛΛΟΥ ΤΟΥ ΜΑΛΚΟΥ, which is the ingenious Conjecture of that excellent Grammarian Mr. *William Baxter.*

4. *Pag.* 102. *Septimium Vorodem Procuratorem Ducennarium Auguſti &* ΑΡΟΑΠΕΤΗΝ. This Word, if *Greek*, is faultily tranſcribed; and in one Copy I have ſeen, the O is very ſmall, as I ſuppoſe it on the Stone, which might occaſion the tranſcribing thereof without it in the former Voyage (*Pag.* 130.) So that 'tis moſt probable that 'tis the remains of ſome other Letter almoſt worn out. I conjecture it to have been ΑΡΤΑΓΕΤΗΝ, Π being taken for Γ, and that this *Septimius* was *Præfectus Annonæ*, having the Care to ſee that the City were ſufficiently provided with Bread; which was a moſt neceſſary Officer in a Place that muſt needs be furniſh'd with Corn from Abroad. And this ſame *Septimius*, (in the Inſcription, *Pag.* 105.) is ſtiled ..... ΕΟΔΟΤΗΝ ΤΗC ΜΗΤΡΟΚΟΛωΝΕΙΑC. *lege* ΚΡΕΟΔΟΤΗΝ, which ſhould ſignify that he was the Diſtributor of the Emperor's Munificence in Fleſh to the People. Theſe Inſcriptions bear Date in *April Anno Dom.* 267. not long before the Death of *Odænathus*, who is herein ſtiled CΕΒΑCΤΟC: and 'tis not improbable but he might inſtitute ſuch a Cuſtom, as at the publick Charge, to give the People a Largeſs in Fleſh on particular Days, to reconcile them to the Dominion of their Fellow-Citizen. This is certain, that *Au-*

relian firſt inſtituted ſuch a Cuſtom of giving Fleſh at *Rome*: The Words of *Vopiſcus* are, *Idem Aurelianus & porcinam carnem populo Romano diſtribuit, quæ hodieque dividitur*; which Cuſtom continued till the Time of *Conſtantine*, when (according to *Zoſimus*) one *Lucian*, who had this Office of diſtributing Swines Fleſh at *Rome*, had Intereſt enough among the People to ſet up *Maxentius* for Emperor; and *Salmaſius* aſſures us, that it was not diſcontinued till the Time of *Heraclius*. It will not therefore ſeem ſtrange, if I ſuppoſe *Aurelian* might find that Cuſtom at *Palmyra*, and at his Return from thence inſtitute the like at *Rome*.

I am enclined to believe, that not only thoſe two Inſcriptions, *Pag.* 102, and the laſt of *Pag.* 103, but alſo that of *Pag.* 106, were in Honour of the ſame *Septimius Vorodes*, who ſeems to have been a great Favourite of *Odænathus*, and was without doubt reſpected by the *Romans* on that Account, whom I conclude to have effaced all the Memorials of *Zenobia* and *Waballathus*, inſomuch that no one appears, among thoſe many taken, that was ſet up during the ſix Years they reigned. The Name *Vorodes* ſeems the ſame with *Orodes*, which was the Name of the King of the *Parthians* that ſlew *Craſſus*: And the *Perſians* having, about forty Years before, expelled the Race of the *Arſacidæ*, 'tis not improbable but the Remains of that Royal Family might fly for Succour to *Palmyra*, and this *Vorodes* might be one of them.

5. In two other Copies of theſe Inſcriptions; the firſt of *pag.* 104. is read, Σεπτιμιον Αιελι-

Αἰρήνιω Ὀδαινάθῳ, and not Ὀδαινόθῳ as in the firſt Copy, and perhaps ought rather to be Ὀδαινάθου, as being the Inſcription under a Statue of the ſame *Odænathus*, who is here, as well as on his Tomb, ſtiled *Illuſtriſſimus Patricius*, but without a Date.

6. ΤΠΟ ΙΑΡΙΒωΛΟΥ ΘΕΟΥ (*pag.* 101. & 109.) It cannot well be doubted but that this *Deus Jaribolus* is the ſame with what *Gruter* (*pag.* 86.) and *Spon* (in the firſt of his Inſcriptions) reads ΑΓΛΙΒωΛω. By the Figure of the Idol extant in *Spon*, it appears that this God was made with the Moon upon his Shoulders, and conſequently was the *Deus Lunus* worſhiped by the *Syrians*, whoſe Name, in the Language of that Country, could not be better expreſſed than by *Jarehbol* יהּ בּיעל *Dominus Lunus*. Whence I am induced to believe, that *Gruter* miſtook it ΑΓΛΙΒωΛω for ΑΓΑΙΒωΛω, the I in the Beginning, and the lower Part of the round Stroke of the P, being effaced, ſo as to paſs for Γ. I have taken care to have the Stone purpoſely viewed, as alſo to get from thence the exact Figure of the *Syrian* or *Palmyrene* Characters thereon, wherein there is an irreconcilable Difference between *Spon* and *Gruter*. By the help of theſe, compared with two others taken at *Palmyra*, which I have by me, (they being all very near the ſame Date,) I hope we may be able, one Day, to make out the *Palmyrene* Alphabet: But it were to be wiſh'd our Travellers had tranſcribed them with more Curioſity, and taken more of them.

By the Way, it is remarkable, that the Perſon who dedicated this Monument, in *Gruter* and

and *Spon*, is ſtiled Λ. ΑΤΡ. ΗΛΙΟΔωΡΟC: and the ſame Name occurs in a broken Inſcription which Mr. *Hallifax* omitted in his Letter to Dr. *Bernard*, as being too imperfect. It ſtood on the right Hand of the Entrance to the little Temple deſcribed *pag.* 110. and was thus,

ΛΟΥΚΙΟΥ ΑΥΡ'Η[ΛΙ]ΟΥ ----- ΗΛΙΟΔωΡΟΥ ΤΟΥ.

And after a Blank of three Lines all worn out except one ſingle O, there followed,

[ΤΕΙ]ΜΗC ΧΑΡΙΝ ΕΤΟΤC ------- ΜΗΝΟC [ΑΠ] ΕΛΛΑΙ[ΟΥ] And that imperfect one in *pag.* 104. ſeems to have relation to the ſame Name.

7. *Pag.* 111. ΜΑΛΕΝΤΟΝ ΚΑΙ ΑΓΡΙΠΠΑΝ *lege* ΜΑΛΗΝ ΤΟΝ ΚΑΙ ΑΓΡΙΠΠΑΝ, it being written ΜΑΛΗΝΤΟΝ, with H in the two other Copies I have ſeen, whereby the Senſe is cleared.

8. *P.* 117. ΑΓΑΘΑΝΓΕΛΟC ΑΒΙΛΗΝΟC ΤΗC ΔΕΚΑΠΟΛΕΟC, *Agathangelus Abilenus, Decapolitanus, Patronymice.* There were in theſe Parts two Cities known by the Name of *Abila*; to diſtinguiſh which, the one was called *Abila Lyſaniæ*, from the Name of the Tetrarch: St. *Luke*, ch. iii. 1. and is placed by *Ptolomy* (in his *Cœlo-Syria*) about mid-way between *Damaſcus* and *Heliopolis:* The other in *Judæa*, called *Abila ad Jordanem*, deſcribed by *Joſephus* in many Places, to lie over againſt *Jericho*, near the *Dead-Sea*. *Decapolis* was ſo called from its ten Cities, enumerated by *Pliny* (*lib.* 5. 18.) And with them he reckons up, among others, the *Tetrarchy* of *Abila*, in the ſame *Decapolis:* Which demonſtrates the

Abila

Abila Decapolis and *Abila Lyſaniæ* to be the ſame Place. And tho' it cannot be denied, but that ſome of *Pliny*'s ten Cities are not far diſtant from that near *Jordan*; yet it doth not appear that ever this other had the Title of a *Tetrarchy*. Here it is to be obſerved, that what *Pliny* calls *Decapolis*, *Ptolomy* makes his *Cœle-Syria*; and the *Cœle-Syria* of *Pliny*, is that Part of *Syria* about *Aleppo*, formerly call'd *Chalcidene*, *Cyrrhiſtice*, &c.

What this Town of *Teibe* was anciently call'd, is not ſo eaſily conjectured: But if the Numbers of *Ptolemy* may be confided in, it is very near the Situation of a City he calls *Oriza*; and perhaps his *Adada* may be our *Soukney*, and his *Rhæſapha* what is now called *Arſoffa*.

It is taken for granted, that Old *Aleppo* was anciently the City of *Berrhæa*, and there wants not ancient Teſtimony to prove it; which being granted, I think I may without ſcruple conclude, that *Andrene* (*pag.* 122. and 133.) is the Ruins of the City of *Androna*; and *Eſree* (*pag.* 135.) that of *Seriane*, both mentioned in the Itinerary of *Antoninus*, in the Journey *à Dolichâ Seriane*. But this whole Country is laid about half a Degree more Southerly than it ought, by *Ptolemy*, who places *Berrhæa* in Lat. 36. *deg.* For the Meridian Altitude of the Tropical Sun at *Aleppo* is found there but 77 *deg.* whence the Latitude 36 *deg.* 30 *min.* as it was obſerved, *Anno* 1680. by three ſeveral Quadrants, in the preſence of a curious Gentleman, to whom I am obliged for this Communication.

By

By the ſame Obſervation a much greater Error is amended in the Latitude of *Aleppo*, in the *Rudolfine* Tables of *Kepler*, who ſuppoſes *Aleppo* to have been the ancient *Antiochia ad Taurum*, and accordingly places it Lat. 37. *deg.* 20 *min.* wherein he is followed by *Bullialdus* and others; and ſeveral Maps have copied the Miſtake. But a much greater Uſe of it is, that thereby we are aſſured, that the City of *Aracta*, wherein *Albatani* made the Obſervations we have publiſh'd in the *Philoſoph. Tranſact. Numb.* 204. was, without doubt, the ſame which is now called *Racca* on the *Euphrates*; of which Town an Account may be ſeen in *Rauwolf*'s Voyages, and which was not many Miles below the Place where our Travellers firſt came on the River: And if *Arecca*, in the Language of this Country, relates to Victory (as is ſaid in *pag.* 143.) it was, doubtleſs, anciently the City *Nicephorion*, built by *Alexander the Great*; with which the Situation exactly agrees. The Latitude thereof was obſerved by that *Albatani* with great Accurateneſs, about eight hundred Years ſince; and therefore I recommended it to all that are curious of ſuch Matters, to endeavour to get ſome good Obſervation made at this Place, to determin the Height of the Pole there, thereby to decide the Controverſy, whether there hath really been any Change in the Axis of the Earth, in ſo long an Interval; which ſome great Authors of late, have been willing to ſuppoſe. And if any curious Traveller or Merchant reſiding there, would pleaſe to obſerve, with due Care, the Phaſes of the Moon's Eclipſes at *Bagdat*, *Aleppo* and *Alexandria*,

thereby to determine their Longitudes, they could not do the Science of Aſtronomy a greater Service: For in and near theſe Places were made all the Obſervations whereby the middle Motions of the Sun and Moon are limited: And I could then pronounce in what Proportion the Moon's Motion does accelerate; which that it does, I think I can demonſtrate, and ſhall (God willing) one Day, make it appear to the Publick.

The *Philoſophical Reader* is deſired to excuſe our breaking in upon the Subject of theſe Tracts, by intermixing hiſtorical and philological Matters, as alſo our exceeding the Bounds of an Extract: But we hope the Curioſity of the Subject, joined to the Deſires of the *Royal Society*, may make an eaſy Apology ſuffice. There may be many other inſtructive Remarks made thereon, which ſtill deſerve the Conſideration of the Learned, and from ſuch the Publick may yet expect a further Account.

A Voyage of the Emperor of China *into the Eaſtern* Tartary, *Anno* 1682.

THE Emperor of *China* made a Voyage into Eaſtern *Tartary*, in the Beginning of this Year 1682, after having appeaſed (by the Death of three rebellious Kings) a Revolt, formed in ſome Provinces of the Empire: One of thoſe revolted Princes was ſtrangled in the Province, of which he had made himſelf Maſter: The ſecond being brought to *Pekin* with the principal Heads of his Faction, was cut in Pieces in the Sight of the whole Court: The moſt conſiderable among the *Mandarines*, acting with their own Hands in this ſad Execution, to revenge upon this Rebel the Death of their Parents, which he had cauſed to be cruelly murdered. The third, which was the moſt conſiderable, (and indeed the chief of all the Revolt) had by a voluntary Death prevented his deſerved Puniſhment, and ſo put an end to a War, which had laſted for ſeven Years.

The Peace having been ſettled, by the Reeſtabliſhing in the Empire and all the Provinces, the peaceable Enjoyment of their ancient Liberties, the Emperor departed the 23d of *March* to go into the Province of *Leao-tum*, the Country of his Anceſtors, with

a Deſign of viſiting their Sepulchres, and (after having honoured them with the uſual Ceremonies) of proſecuting his Journey into the Eaſtern *Tartary*: This Journey was about 1100 Miles, from *Pekin* to the End of it.

The Emperor took with him his eldeſt Son, a young Prince of ten Years old, which had already been declared Heir of the Empire: The three principal Queens went alſo in this Journey, each in their gilded Chariot; the principal Kings alſo which compoſe this Empire, were accompanying with all the Grandees of the Court: And the moſt conſiderable *Mandarines* of all the Orders, who having all a very great Train of Attendants, and very numerous Equipage, made a Court about the Emperor of more than 70000 Perſons.

It was his Will that I ſhould accompany him in this Journey, and that I ſhould be always near him, to the End I might make in his Preſence, the Obſervations, neceſſary for knowing the Diſpoſition of the Heavens, the Elevation of the Pole, the magnetical Declinations of every Place, and for meaſuring with Mathematical Inſtruments the Height of the Mountains, and the Diſtances of Places: He was well pleaſed alſo to be informed of what concerned Meteors, and many other Phyſical and Mathematical Matters.

In ſo much, that he gave Order to an Officer to carry upon Horſes ſuch Inſtruments as I ſhould have Occaſion to make uſe of, and recommended me to the Prince his Uncle, who is alſo his Father-in-Law, and the ſecond

cond Perſon of the State; he is called by a *Chineſe* Name, which ſignifies an Aſſociate of the Empire: He gave charge to him to cauſe all things to be provided for me which were neceſſary for this Journey, which this Prince performed with a very particular Goodneſs, cauſing me to lodge always in his own Tent, and to eat at his Table.

The Emperor ordered that they ſhould give me Horſes of his own Stables, to the End I might the more eaſily change in riding, and ſome of thoſe were of them he himſelf had rid, which is a Mark of very extraordinary Diſtinction. In this Journey we always went toward the North-Eaſt: From *Pekin* to the Province of *Leao-tum*, the Way being about 300 Miles is pretty equal: In the Province it ſelf of *Leao-tum*, it is about 400 Miles, but much more unequal by reaſon of the Mountains; from the Frontier of this Province to the City of *La*, or the River which the *Tartars* call *Songoro*, and the *Chineſe Sumhoa*, the Way (which is about 400 Miles) is very difficult, being croſſed ſometimes by Mountains extreamly ſteep, ſometimes by Valleys of extraordinary Depth, and through deſert Plains, wherein for two or three Day's March we met with nothing. The Mountains of this Country are covered on the Eaſt Side with great Oaks and old Forreſts, which have not been cut for ſome Ages.

All the Country which is beyond the Province of *Leao-tum* is exceeding deſert, where nothing is to be ſeen on all Sides but Mountains and Valleys, and Dens of *Bears*, *Tygers*

and other *devouring* Beaſts, you can ſcarce find a Houſe, but only ſome *poor Reed Hutts*, upon the Sides of ſome Brooks and Streams. All the Cities and *Burrough-towns* which I have ſeen in the Province of *Leao-tum*, and which are in very great Numbers, are intirely ruined: One can ſee nothing thro' the whole Country, but old ruined Walls with Rubbiſh, Bricks and Stones. In the Out-ſkirts of theſe Cities there have been of late ſome few Houſes built, but without any Order. Some of them made of Earth, others of the Rubbiſh of the old Buildings, the moſt Part of them covered with Straw or Thatch, and but few with Tiles. There is now not the leaſt Footſteps remaining of a great Number of Towns and Villages which were here before the War. Becauſe the petty King of the *Tartars*, who began to kindle this War, having but a very ſmall Army, cauſed the Inhabitants of thoſe Places to take Arms, which Places he forthwith deſtroyed, that he might take from his Soldiers the Hopes of ever returning again to their own *Homes*.

The capital City of *Leao-tum*, which is called *Xin-Yam*, is a City very fair and pretty intire, it has as yet the Remains of an ancient *Palace*. It is (for as much as I was able to remark by divers Obſervations) of the Latitude of 41 *Degrees* 56 *Minutes*; that is to ſay, two *Degrees* above *Pekin*, tho' hitherto both the *Europeans* and the *Chineſe* have given that City the Latitude of 41 *Degrees*. There is in that City no declination of the magnetick Needle, as I have found by many reiterated Obſervations. The City of *Ula*, which was almoſt the very Extream of our Journey,

ney, lies in 44 *Degrees* and 20 *Minutes*. The Compaſs there declines from the South to the Weſt one *Degree* 40 *Minutes*.

But to reſume the Proſecution of our Journey, from *Pekin* to this Extream towards the Eaſt there is made a new Way, by which the Emperor can commodiouſly march with his Horſe, and the Queens in their Chariots. This Way is about 10 *Foot* broad, and as even and ſtreight as could poſſibly be made; it is extended above 1000 *Miles*; it has a little Raiſing on each Side of about a Foot high every where equal and perfectly parallel to one another; and this Way was as neat, eſpecially when the Weather was fair, as a Floor where the Huſbandmen beat out their Corn in the Field; there were alſo certain Perſons along this Way, who only took care to ſmooth and cleanſe it. The Chriſtians have no where ſo great Care of ſweeping their Streets and publick Places where the Holy Sacrament is to paſs in the Proceſſions, as theſe Infidels have of cleanſing the Ways, where their Kings and their Queens are to paſs, every time they go out of their Palaces.

There was made for their Return a Way like the former, they planed or levelled the Mountains as far as they were able, they raiſed Bridges over the Rivers, and for ornamenting them, they had extended on each Side of them a Sort of Mats upon which they had painted divers Figures of Animals, which had the ſame Effect with Tapeſtry Hangings, with which the Streets are uſually hung in Proceſſion.

The Emperor did very ſeldom make uſe of this Way, being almoſt always in Hunt-

ing: And when he accompanied the Queen's he only rode by the Side of it, to the End that the great Number of Horſe which were in the Train that followed ſhould not ſpoil it: He ordinarily marched at the Head of this kind of Army. The Queens followed immediately in their Chariots, with their Train and their Equipage; they notwithſtanding left ſome Space between the King and themſelves: After theſe marched the Kings, the Grandees of the Court and the *Mandarines*, every one according to his Rank, behind theſe an infinity of Attendants, and other People on Horſe-back brought up the Rear-guard.

As there was not one City upon all this Way, that could either lodge ſo great a Multitude, or furniſh them with Proviſions, and that the greateſt Part of their Journey was through a Country very little inhabited; ſo they were neceſſitated to carry along with them all things that were neceſſary for the Journey, and even Proviſions of Victuals for three Months.

Upon this Account there were ſent before by the Ways which were made on each Side of the Emperor's Way, an infinity of Waggons, Camels, Horſes, and Mules for to carry the Baggage: Beſides theſe the Emperor, the Kings and almoſt all the Grandees of the Court, had great Numbers of Horſes led, for the Uſe of changing from Time to Time. I do not here reckon the Droves of Beefs, Sheep and other Cattle, which they were obliged to have with them. And though this great Multitude of Men, Horſes, and Droves,

paſſed

paſſed by a Way, at a good Diſtance from that of the Emperor, yet it raiſed ſo horrible a Duſt, that we always ſeemed to march in a Cloud, and thence found it difficult to diſtinguiſh thoſe that marched 15 or 20 Paces from us.

The March was ſo well regulated, that this Army incamped every Night upon the Sides of ſome River or Brook. 'Twas for this Reaſon that they cauſed the Tents and the Baggage neceſſary for this incamping to ſet out very early in the Morning; and the Quarter-maſters upon their firſt Arrival, marked the Ground moſt proper for the placing of the Emperor's Tent, of the Queens, of the Kings, of the Grandees of the Court, of the *Mandarines*, each according to his Dignity, and according to the Dignity he had in the *Chineſe* Militia, which is divided into eight Orders, or into eight Standards.

In the Space of three Months we paſſed about 1000 *Miles*, advancing towards the North-Eaſt, and about as many in our Return: In fine, we arrived at *Kam-Hay*, which is a Fort ſituated between the South Sea and the Mountains of the North: It is there where is the Beginning of that ſo much celebrated Wall, and which ſeparates the Province of *Leao-tum* from that of *Pekely*; from whence it is extended very far on the Side of the North over the Tops of the higheſt Mountains. When we entred this Province, the Emperor, the Kings, and the Grandees of the Court, quitted the great Way of which we have hitherto ſpoken, to take that of the Mountains of the North, which are extended without Interruption towards

wards the North-Eaſt: There ſome Days were paſſed in Hunting which was performed in this Manner.

The Emperor chooſe 3000 Men of his Life-guard, armed with Arrows and Javelins, and diſperſed them ſome on this Side ſome on that; ſo that they poſſeſt themſelves of a great Circuit about the Mountains, which they invironed on all Parts, which made a kind of Circle whoſe Diameter was at leaſt 3000 *Paces*; then marching to draw nearer together with equal Progreſs, and without quitting their Range, whatever Obſtacles they found in the Way (the Emperor having joined with them ſeveral of the Captains, and of the Grandees of the Court, for the better keeping of their Order) they reduced this great Circle to another much leſs, which had about 300 *Paces* in the Diameter: So that all the Beaſts which had been ſtayed within the firſt, found themſelves taken in this laſt as in a Net: For that every one ſetting his Feet upon the Ground, they locked themſelves together ſo cloſely, that they left no meſhing Place for them to make their Eſcape by. Then they purſued them ſo vigorouſly in this little Space, that the poor Creatures tired with the violence of their Courſing, came and fell down at the Feet of their Chaſers, and ſuffered themſelves to be taken without trouble. I ſaw taken in this Manner two or three hundred Hares in leſs than one Day, without counting an infinite Number of Wolves and Foxes. I have ſeen the ſame thing divers times done in that Part of *Tartary*, which is on the other Side of the Province of *Leao-tum*, where I remember

remember to have ſeen among others, more than 1000 Deer ſo pent up by theſe Sort of Nets, which came to caſt themſelves into the Hands of the Hunters, having found no Paſſage to ſave themſelves by: They killed alſo Bears, Boars, and more than 60 Tygers, but theſe are taken by other means, and with other Weapons.

The Emperor will'd that I ſhould be preſent at all theſe different Huntings, and he recommended to his Father-in-Law, in a moſt obliging Manner the having a particular Care of me, and of giving Charge that I ſhould not be expoſed to any Danger in the hunting of the Tigers, and the other fierce Beaſts; I was the only Perſon of all the *Mandarines*, who was without Arms, and ſo near to the Emperor; though I made light of the Fatigue during the Time we were in our Journey, I found my ſelf ſo wearied every Evening when I got to my Tent, that I was not able to ſupport my ſelf; and I ſhould have diſpenſed with my ſelf divers times from following the Emperor, if my Friends had not counſel'd me to the contrary, and if I had not fear'd that he would have taken it ill, if he ſhould have perceived it.

After having paſſed about 400 Miles in hunting daily after this Manner, we arrived at laſt at *Xyn-Yam*, the capital City of the Province, where we ſtayed four Days.

The Inhabitants of *Coree* came to preſent to the Emperor a *Sea-Calf* which they had taken; the Emperor cauſed me to ſee it, and aſked whether our *European* Books had ſpoken any thing of this Fiſh? I told him we had a Book

Book in our Library at *Pekin* which had explain'd the Nature of it, and diſpatched preſently a Courier to our Fathers at *Pekin*, who brought it me in a few Days: the Emperor was pleaſed to ſee that what was ſaid of this Fiſh in this Book, was agreeable to this which he had ſeen, and cauſed it to be carried back again to *Pekin* to be carefully preſerved.

During the Stay which we made in this City, the Emperor with the Queens went to viſit the Sepulchres of his Anceſtors, which are not very far diſtant, from whence he ſent them back to *Xyn-Tam*, to continue his own Journey into the Eaſtern *Tartary*.

After ſeveral Days of Marching and Hunting, he arrived at *Kirin*, which is diſtant from *Xyn-Tam* 400 Miles: This City is built along the great River *Songoro* which takes its ſource from the Mountain *Cham-pe*, diſtant 400 Miles towards the South: This Mountain, ſo famous in the Eaſt for having been the ancient Seat of our *Tartars*, is always covered with Snow, from whence it had its Name, becauſe *Cham-pe* ſignifies the White Mountain.

So ſoon as the Emperor ſaw it, he alighted from his Horſe and fell on his Knees on the Bank of the River, and bowed himſelf three Times to the Ground to ſalute it: After which, he cauſed himſelf to be carried upon a glorious Throne of Gold, and ſo made his Entry into the City: All the People ran in a Throng before him, teſtifying by their Acclamations the Joy they had to ſee him. This Prince took great Pleaſure in thoſe Teſtimonies of their Affection; and that he might

might give them ſome Marks of his being very ſenſible of it, he was pleaſed to ſuffer himſelf to be ſeen by all, and forbid his Guards to hinder the People from approaching him, as they uſed to do at *Pekin*.

They make in this City Barks of a very particular Manner: The Inhabitants keep always a great Number of them ready fitted to repulſe the *Muſcovites*, who come often into this River, to diſpute the Fiſhing of Pearls. The Emperor repoſed himſelf two Days, after which he deſcended upon the River, with ſome Lords, accompanied with more than 100 Boats, till he arrived at the City of *Ula*, which is the faireſt of all this Country, and which at other times hath been the Seat of the Empire of the *Tartars*.

A little below this City, which is at moſt about 32 *Miles* from *Kirin*, the River is very full of a certain Fiſh which reſemble near enough the Plaice of *Europe*: And 'twas principally for the taking the Divertiſement of Fiſhing, that the Emperor went to *Ula*; but the Rains coming on ſo ſuddainly, ſwelled the River ſo much, that all their Nets were broken and carried away, by the great Flood of thoſe Land Waters: The Emperor notwithſtanding ſtayed 5 or 6 Days at *Ula*; but ſeeing the Rains were not at all diſcontinued, he was obliged to come back to *Kirin*, without having enjoyed the pleaſure of Fiſhing: As we aſcended the River, the Bark wherein I was with the Emperor's Father-in-Law, was ſo endamaged by the Agitation of the Waves, that we were conſtrained to go aſhore, and mount a Chariot drawn by one Ox, which

carried us very ſlowly to *Kirin*, the Rains not at all ceaſing during our Journey.

In the Evening when the Emperor was entertained upon all theſe Adventures, he ſaid laughing, *the Fiſh have cheated us*; at length, after we had ſtayed two Days at *Kirin*, the Rains began to diminiſh, and we re-took our Way towards *Leao-tum*. I cannot here expreſs the Pains and Fatigues theſe had cauſed us to undergo, during the whole Courſe of this Journey, by Reaſon of the Ways which the Rains had ſpoiled, and rendred almoſt impaſſable: We went without ſtaying over the Mountains and over the Vallies, and we could not paſs but with extream Danger, the Brooks and Rivers which were ſwelled by the Floods and Inundations which ran from all Parts: The Bridges were either overturned by the Violence of the Currents, or all covered by the great overflowing of the Waters. There were made in divers Places great Collections of Water, and of Mud, that it was almoſt impoſſible to be drawn out of it. The Horſes, Camels, and other Beaſts of Burthen, which carried the Baggage, could not advance, but remained ſticking in the Mud of the Marſhes, or died of tiring upon the Ways. The Men were not at all leſs incommoded, and all were enfeebled for want of Victuals, and of Refreſhments neceſſary for ſo great a Journey: Many of the Horſemen were obliged, either to lead their Horſes on Foot, who were no longer able to carry them, or to reſt in the Middle of the Fields to ſuffer them to take Breath: And though the Quarter-maſters and the Harbingers ſpared not their Pains, nor for

for Wood (which they cut on all Sides) to fill with Faggots all the bad Paſſages: Yet notwithſtanding, after the Horſes and Chariots, which took the Van early in the Morning, had quite paſſed, it was impoſſible to paſs after them: The Emperor himſelf, with his Son, and all the great Lords of the Court, were obliged more than once, to foot it over the Mud and the Marſhes, fearing to expoſe themſelves to greater Danger, if they ſhould have paſſed them on Horſeback.

When they came to Bridges, or thoſe other Obſtructions, all the Army ſtayed: And as ſoon as the Emperor was paſſed, with ſome of the moſt conſiderable Perſons, all the reſt came together in a Throng, and every one ſtriving to paſs firſt, many were tumbled over into the Water: Others taking Ways more about, found them more dangerous, falling into Sloughs and Bogs, out of which they could not recover themſelves. In fine, there were ſo many Inconveniencies to be met with, in all the Ways of Eaſtern *Tartary*, that the old Officers, who had followed the Court above 30 *Years*, ſaid they had never ſuffered ſo much in any Journey.

It was on thoſe Occaſions, that the Emperor more than once, gave me the Marks of a Reſpect altogether particular: The firſt Day that we put our ſelves in the Way for returning, we were ſtay'd in the Evening, by a Torrent ſo great and rapid, that 'twas impoſſible to ford it: The Emperor having by chance found a little Boat, which could not hold above 4 Perſons at moſt, paſſed firſt with his Sons, and ſome of the Principal Kings followed: All the other Princes, Lords, and

Mandarines, which the reſt of the Army attended, (in the mean while) with Impatience the Return of the Boat, to carry them to the other Side of the Torrent, becauſe the Night approached, and the Tents had long before paſſed: But the Emperor being come back to us in ſuch another Boat as the former, demanded aloud where I was? And his Father-in-Law having preſented me to him, he added, let him come in and croſs over with us: So we were the only Perſons that paſſed with the Emperor; and all the reſt ſtayed on the Bank, where they muſt paſs the Night *under the open Heaven:* The ſame thing happened the next Day almoſt in the ſame Manner. The Emperor at Noon meeting with a like rapid and ſwelled Torrent, gave order that the Boats ſhould be made uſe of for tranſporting the Tents, Packs, and other Baggage till the Evening; then willed that I ſhould paſs alone with him and ſome few of his Attendants, having left on the other Side all the great Lords, who were neceſſitated to paſs the Night there. The Emperor's Father-in-Law himſelf, having aſked if he ſhould not paſs with me, ſince I lodged in his Tent and eat at his Table? This Prince anſwered him, that he ſhould ſtay, and he himſelf would take Order to give me what was neceſſary.

After we had paſt, the Emperor ſitting on the Bank-ſide, made me ſit by him, with the two Sons of the two petty Weſtern Kings, and the firſt *Colao* of *Tartary*, whom he diſtinguiſhed on all Occaſions.

As the Night was fair, and the Heavens very clear, he willed me to name the *Chineſe*

neſe and *European* Languages, all the Conſtellations that then appeared above the Horizon, and he himſelf firſt named all thoſe he already knew; then unfolding a ſmall Map of the Heavens, which I had ſome Years ſince preſented him, he put himſelf upon inquiring the Hour of the Night, by the Stars in the Meridian: Pleaſing himſelf to ſhew to all the Knowledge he had acquired in theſe Sciences. All the Marks of his Favours which he ſo often gave me, even to the ſending me to eat from his own Table; theſe Marks, I ſay, were ſo publick, and ſo extraordinary, that the two Unkles of the Emperor, who bore the Titles of Aſſociates of the Empire, being on their Return to *Pekin*, ſaid that when the Emperor had ſome Regret or appeared ſomewhat ſad, he would reſume his ordinary Gaiety upon the ſight of me.

I arrived at *Pekin* in perfect Health the *9th* day of *June* very late, though divers were detained in the Way by Diſtempers, or were returned from their Journey, hurt and lamed.

I ſay nothing of what we did for Religion in this Journey, having reſerved that for a particular Relation, by which it will appear, that by the Grace of our Lord, the Favours we received at the Court of *China*, produced conſiderable Fruits for the Church, and did not take away the Croſs from the Miſſionaries.

I ſhall here add the *Tartarean* Names, and the diſtance of every Place through which we paſſed in the Eaſtern *Tartary*, from the Capital of the Province of *Leao-tum* even to *Kirin*, according to the Order of Days which we ſpent in this Progreſs. *A Topographick*

phick Chart may be made and inſerted into the Map of the Province of *Leao-tum*, to be found in the Atlas of Father *Martin Martinius*, by changing only the *Latitudes* according to the Heights of the *Pole*, which we have before ſpecified.

I ſhall add one thing more which I underſtood from the Inhabitants of *Ula*, to wit, that *Nincrita* (which is a Place much renowned in thoſe Parts) is diſtant from *Ula* 700 *Chineſe Stadia* (each of which is 360 *Geometrical Paces*,) and that embarking at *Nincrita* upon the great River *Heleum*, into which the *Songoro*, and ſome other more conſiderable Rivers are diſcharged, and following the Courſe of the River, which runs towards the North-Eaſt, or ſomewhat more to the North, they arrive in 40 Days Journey at the Eaſtern Sea, which is (as I believe) the Streight of *Anien*: I was told this by the General of the Militia which is at *Kirin*; and who had performed this Voyage himſelf.

The Distances of the Places, thro' which we passed in the Eastern Tartary.

THE first Day we passed from *Xym-Yam*, the Capital of the Province of *Leao-tum*, and we arrived at *Seao-Lysto*, so the Place is called in the *Chinese* Language. —— 95. *stadia.*

The 2*d* Day we arrived at *Cha-cay Angha.* —— 85. *stadia.*

The 3*d* Day at another Torrent of the same Name. —— 70. *stadia.*

The 4*th* at *Kiaghuchen.* —— 50. *stadia.*

The 5*th* at *Feyteri.* —— 80. *stadia.*

The 6*th* at the Torrent of *Seipery.* 60. *stadia.*

The 7*th* at the Torrent of *Ciam.* 60. *stadia.*

The 8*th* at *Courou.* —— 50. *stadia.*

The 9*th* at the Burrow of *Sape.* —— 40. *stadia.*

The 10*th* at *Quaranny Pira.* —— 40. *stadia.*

The 11*th* at *Elten eme Ambayaga.* 70. *stadia.*

The 12*th* at *Ypatan.* —— 58. *stadia.*

The 13*th* at *Suayen ny Pyra.* —— 60. *stadia.*

The 14*th* at *Ylmen.* —— 70. *stadia.*

The 15*th* at *Seuten.* —— 70. *stadia.*

The 16*th* at the City of *Kirin.* —— 70. *stadia.*

1028.

All this Course being 1028 *Chinese* Stadia, contains 369 Miles (each) of 1000 Geometrical Paces; the *Chinese* Stadium containing, as I mentioned before, 360 Geometrical Paces.

A Voyage of the Emperor of China, *into the Weſtern* Tartary, *in the Year*, 1683.

THE Emperor this Year, which is the 30*th* of his Age, made a Voyage into the Weſtern *Tartary*, together with the Queen his Grand-mother, which they call the Queen *Mother*; he departed the 16*th*. of *July*, in the Company of more than 60000 Men, and 100000 Horſe. He poſitively reſolved, that I, with one of the two Fathers that were at the Court of *Pekin*, the Choice of which he left to me, ſhould follow him; I choſe Father *Philip Grimaldi*, becauſe he is the moſt known, and becauſe he perfectly underſtood the *Mathematicks*.

Several Reaſons prevailed with the Emperor to enterprize this Journey. The firſt was, that he might keep his Militia during the Peace as well as in the Wars, in continual Exerciſe; and for this Reaſon it was, that after he had eſtabliſh'd a firm Peace in all the Quarters of this ſo vaſt an Empire, he recalled his beſt Troops hither out of every Province, and reſolved in his Council to make every Year Expeditions of this kind, in ſeveral Seaſons, that by hunting of Deer, Boars, Bears, and Tigers, they might learn to overcome the Enemies of the Empire,

or at leaſt to prevent the cooling of their Courage, or the degenerating from their priſtine Valour, by the Luxury of *China*, in a too long Repoſe.

In effect theſe kinds of Hunting had more of the ſhew of a military Expedition, than of one for Divertiſement, as I have already noted: The Emperor took in his Train, 100000 Horſe, and above 60000 Men, all armed with Arrows and Cimeters, divided into Companies and marching in Battel-Array after their Colours, with the ſound of Drums and Trumpets: During their Hunting, they entirely inveſted the Mountains and Forreſts, as if they had been Cities which they deſign'd to beſiege; following in this the manner of hunting uſed by the Eaſtern *Tartars*, of which I have ſpoken in my laſt Letter. This Army had its Van-guard and Reer-guard, and its main Body; its Right Wing and left Wing, was commanded by ſo many Generals and petty Kings. There were ſpent more than Seventy Days before they were on their March, in bringing together all the Ammunition of the Army upon the Waggons, upon the Camels, upon the Horſes, and upon the Mules, by reaſon of the incommodious Ways. For in all the weſtern *Tartary* (I call it Weſtern) not with relation to *China*, which lyeth in Reſpect of it Weſtward it ſelf, but with reſpect of the Eaſtern *Tartary*) there is nothing to be found but Mountains, Rocks, and Vallies; there are neither Cities, Towns, nor Villages, nor ſo much as any Houſes. The Inhabitants lodge under Tents, pitched on all ſides in

the open Fields, They are for the moſt part Graſiers, and tranſport their Tents from one Valley to another, according as the Paſtures are better. There they paſture their Beefs, their Horſes, and their Camels, they breed no Hogs, nor any of thoſe other Animals, which elſewhere are fed in the Villages, as Poultry and Geeſe. But only of ſuch as the Herbs, which an uncultivated Land doth naturally produce, will ſerve to ſuſtain. They paſs their Life either in Hunting, or doing nothing. And as they neither ſow nor cultivate the Earth, ſo they make no Harveſt. They live upon Milk, Cheeſe, and Fleſh, and have a ſort of Wine, not much unlike our Aqua-vitæ; with which they make their Feaſts, and are often drunk. In ſhort, they care for nought from Morning to Night but to drink and eat; like the Beaſts, and Droves which they feed.

They are not without their Prieſts, which they call *Lamas*, for whom they have a ſingular Veneration, in which they differ from the Oriental *Tartars*; the moſt part of whom have no Religion, nor do they believe any God. For the reſt, both the one and the other are Slaves, and wholly depend upon the Will of their Maſters, whoſe Religion and Manners they blindly follow: like in this to their Droves, who go where they are led, and not where they ought to go.

This part of *Tartary* lies without the prodigious Wall of *China* about 1000 *Chineſe Stadia*, that is to ſay, more than 300 *European* Miles, and extends from the North-eaſt towards the North.

The

The Emperor rides on Horſeback, in the Head of his Army through theſe Deſart Places, and theſe ſteep Mountains, and far from great Roads, expoſed all the Day to the Scorching of the Sun, to the Rains, and to all the Injuries of the Air. Many of thoſe which had been in the laſt War, aſſured me, that they had not ſuffered ſo much during all that as during this Hunting. In ſo much that the Emperor, whoſe principal Aim it was to give his Forces a Breathing, performed effectually what he pretended.

The ſecond Reaſon he had of undertaking this Journey, was that he might keep the Weſtern *Tartars* in their Duty, and to prevent any pernicious Deſigns that might be formed againſt the States.

It was for this that he entred their Country with ſo great an Army, and with ſo great Preparations for War. Having carried along ſeveral great Guns, that he might cauſe them to be Diſcharged from Time to Time into the Vallies, and by the Noiſe and Fire which iſſued out of the Mouths of thoſe Dragons, which ſerved to ornament them, he might caſt a Dread upon the Rout.

Beſides this great Retinue, he would yet be accompanied with all the Marks of Grandeur with which he was enviorned at the Court at *Pekin*. To wit, with a Multitude of Drums, Trumpets, Timbals, and other Muſical Inſtruments, which formed Conſorts during his ſitting at Table, when he entred the Palace, or when he went out. He cauſed all theſe to march with him, that he might by this outward Pomp aſtoniſh theſe *Bar-*

barous People, to ſtrike them with a Fear and Reſpect of his Imperial Majeſty.

For the Empire of *China* never had any Enemies more to be feared than theſe Weſtern *Tartars*; which beginning on the Eaſt of *China* encompaſs it with an almoſt infinite of People, and keep it as it were continually beſieged on the North and Weſt Sides thereof; and 'twas to make a Bulwark againſt their Incurſions, that a *Chineſe* Emperor in ancient times cauſed this great Wall to be built, which ſeparates *China* from their Country. I have paſſed it four times, and have conſidered it very attentively. And I can ſay without hyperbolizing, that all the ſeven Wonders of the World put together are not comparable to this Work. And all that Fame has ſpread concerning it among the *Europeans*, is far ſhort of what I my ſelf have ſeen.

Two things have more eſpecially cauſed my Admiration. The firſt is, that in this long extent from the Eaſt to the Weſt, it paſſes in ſeveral places not only through vaſt Champaigns, but alſo above the tops of exceeding high Mountains, upon which it is raiſed by little and little, and fortify'd at certain Intervals with great Towers; not diſtant the one from the other more than two flight Shot. At our Return I had the Curioſity to meaſure the height of it in one place by means of an Inſtrument, and I found that it was in that place 1037 geometrical Feet above the Horizon; in ſuch ſort that 'tis hard to comprehend how 'twas poſſible to elevate this enormous Bulwark to the height

we

we ſaw it, in places dry and full of Mountains, whence they muſt be obliged to bring from a great diſtance with incredible Labour, the Water, Brick, Mortar and all the Materials neceſſary for ſo great a Work.

The ſecond thing that ſurpriſed me was, that this Wall is not continued upon the ſame Line, but bent in diverſe places following the Situation of the Mountains, in ſuch manner, that inſtead of one Wall, one may ſay that there are three, which environ all this great part of *China*.

After all, the Monarch which in our Days hath re-united the *Chineſe* and the *Tartars*, under one and the ſame Government, has done ſome things more for the Advantage of the Security of *China*, than the *Chineſe* Emperor that built the long Wall. For after having reduced the Weſtern *Tartars*, partly by Artifice, partly by force of Arms, he has obliged them to go and remain at 300 Miles diſtance from the Wall of *China*; and in this Place he diſtributes to them Land and Paſtures, whilſt he has given their Country to other *Tartars*, his Subjects which have their Habitation there at preſent: Notwithſtanding which theſe Weſtern *Tartars* are ſo powerful, that if they ſhould agree together, they might make themſelves Maſters of all *China*, and of the Eaſtern *Tartary*, even in the Face of the Oriental *Tartars*.

I have ſaid, that the *Tartarian* Monarch that conquered *China*, uſed an Expedient for ſubduing the Weſtern *Tartars*. For one of his firſt Cares was to engage to his Intereſt by

by his Royal Bounties, and by Demonſtration of a ſingular Affection, the *Lamas*, (or *Prieſts*) theſe Men having a great Repute about all thoſe of their Nation, eaſily perſuaded them to ſubmit to the Government of ſo great a Prince; and 'tis in conſideration of this Service done to the Eſtate, that the preſent Emperor looks upon theſe *Lamas* with a favourable Eye, that he beſtows Preſents on them; and that he makes uſe of them to keep the *Tartars* in the Obedience which they owe him: Tho' at the bottom he hath nothing but Diſ-eſteem for their Perſons, and looks upon them as a Sort of ignorant Fellows, which have not the leaſt Tincture of the Sciences or commendable Arts, in which without doubt this Prince ſhews a wiſe Policy, in ſo diſguiſing his true Sentiments, by theſe exterior Marks of Eſteem and Good-will.

He has divided this vaſtly extended Country into 48 Provinces, who have ſubmitted and are tributarry to him. From whence it comes to paſs, that the Emperor that reigns at preſent in *China*, and in the one and the other *Tartary*, may juſtly be called the greateſt and moſt powerful Monarch of *Aſia*, having ſo many vaſt Eſtates under him, without being any where interrupted by the Territory of any foreign Prince, and he alone being as the Soul which gives motion to all the Members of ſo vaſt a Body.

For after he had charged himſelf with the Government, he did not at all intruſt the Care to any of the *Colaos*, nor to any of the great Men of his Court. He has not at all ſuf-

ſuffered, that the Eunuchs of the Palace, or any of his Pages, or any of the young Lords that have been raiſed by him, ſhould diſpoſe of the leaſt thing in his Houſe, or ſhould regulate any thing of themſelves: Which appears very extraordinary; eſpecially if we examine what Cuſtoms his Predeceſſors were wont to uſe.

He chaſtiſes with wonderful Equity the great Ones as well as the Inferiors; he deprives them of their Charges, and makes them deſcend from the Rank they held, proportioning always the Penalty to the Heinouſneſs of their Fault. He takes Cogniſance of the Affairs which are tranſacted in the Royal Council, and in the other Tribunals, even to the cauſing them to render to him an exact account of the Judgments there given. In one Word, he of himſelf diſpoſes and orders all things; and 'tis by reaſon of the abſolute Authority which he hath thus acquired, that the greateſt Lords of the Court, and Perſons of the higheſt Quality in the Empire, even the Princes of the Blood, never appear in his Preſence, but with a profound Reſpect.

But to what remains, the *Lamas* or *Tartarian* Prieſts, of whom we have ſpoken, are not only reſpected by the People, but alſo by the Lords and Princes of their Nation, who for politick Ends teſtifie to them a great deal of Friendſhip: This makes us fear that the Chriſtian Religion will not find ſo eaſie an Entrance into the Weſtern *Tartary*. They are alſo very powerful upon the Mind of the Queen Mother, who is of their Country, and who

who is at preſent Threeſcore and Ten Years Old; they are wont to tell her, that the Sect (of which ſhe makes Profeſſion) has no more declared Enemies than us. And 'tis a kind of Miracle, or at leaſt an extraordinary Protection of God, that notwithſtanding this, the Emperor, who has very much Regard and Reſpect for her, has not hitherto ceaſed to heap on us Graces and Honours, conſidering us after another manner than the *Lamas*.

During the Journey, as the Princes and the chief Officers of the Army went oftentimes to the Queen to attend at her Court; and that we alſo were advertiſed to do ſo likewiſe: We were willing firſt to conſult a Perſon of the Court, who loved us very much, and who ſpake for us to the Emperor in our Affairs. This Lord having enter'd the Prince's Tent, told him what had paſſed, and preſently coming out again: *the Emperor* (ſaid he to us) *has given me to underſtand, that 'tis not at all neceſſary for you to attend the Queen as others do:* which made us to apprehend enough, that this Princeſs did not favour us.

The 3d Reaſon which the Emperor had for making this Journey, was for his Health: becauſe he knew by his Experience long enough, that when he is too long at *Pekin* without going abroad, he cannot avoid his being attacked by ſeveral Diſtempers, which he prevents by means of theſe long Progreſſes. For during the whole time he never ſees any Woman; and that which is more ſurpriſing, there appears not any one in all this great Army, except thoſe which are of the

the Retinue of the Queen Mother: 'tis yet alſo a Novelty that ſhe has accompanied the King this Year, it having not been practiſed above once, when he took with him the three Queens as far as the Capital City of the Province of *Leao-tum*, to viſit the Sepulchers of their Anceſtors.

The Emperor and the Queen Mother pretend moreover by this Journey, to avoid the exceſſive Heats which are in *Pekin*, in the Summer during the Dog-days. For in this part of *Tartary*, there reigns during the Months of *July* and *Auguſt* ſo cold a Wind, eſpecially in the Night, that 'tis neceſſary to put on thick Cloths and Furs. The Reaſon that may be aſſigned for this ſo extraordinary Cold, is that this Region is very much elevated and full of Mountains: there is one among the reſt, upon which we continually aſcended, for the ſpace of 5 or 6 Days March. The Emperor being deſirous to know how much it ſurmounted the Plains of *Pekin*, diſtant about 300 Miles; at our Return (after having meaſured the height of above a hundred Mountains that lay in our Road) we found that it had 3000 geometrical Paces of Elevation, above the Sea that neareſt approached *Pekin*.

The Salt Peter alſo with which theſe Countries abound, may contribute to this great Cold, which is ſo violent, that in digging the Earth to three or four Foot deep, there are fetched out Clods all frozen, and pieces of Ice.

Divers of the Petty Kings of the Weſtern *Tartary* came from all ſides for 300 Miles, and

and ſome for 500 Miles, together with their Children, to ſalute the Emperor. Theſe Princes, who for the moſt part know none but by their own natural Language, which is very different from that of the Eaſtern *Tartary*, took regard of us, with Aſpects and Geſtures of a Goodneſs very particular: There were ſome among them, who had made a Journey to *Pekin* to ſee the Court, and who had ſeen our Church.

One or two Days before we arrived at the Mountain which was the Boundary of our Journey, we met a petty King very aged, who returned from accompanying the Emperor; he ſeeing us ſtayed with all his Retinue, and enquired by his Interpreter, which of us was called *Nauboaij*; one of our Servants having made a Sign that it was I, this Prince accoſted me with a great deal of Civility, and told me that for a long Time he had known my Name, and that he had deſired to know me. He ſpoke alſo to Father *Grimaldi*, with the ſame Marks of Affection. The favourable Entertainment he gave us in this Re-encounter, gave ſome Reaſon to hope that our Religion might find an eaſie Entrance to thoſe Princes, particularly if care be taken to inſinuate into the Minds of thoſe Princes, by the means of the Mathematicks; which if there ſhould at any time be a Deſign to penetrate into their Country, the moſt ſure Way for divers Reaſons, (which I have not the leiſure to explain here) will be to begin the Entrance with other *Tartars* more remote, which are not all Subjects of this Empire, from whom we may paſs on to theſe,

theſe, advancing by little and little towards *China*.

During the whole Journey, the Emperor has continued to give us ſingular Tokens of his good Will, ſhewing us Favours in the ſight of his Army, which he ſhewed to none beſides.

One time meeting us in a great Valley, where we were meaſuring the Height and the Diſtance of ſome Mountains, he made a Stay with the whole Court; and calling to us from a great Diſtance, he demanded of us in the *Chineſe* Language, *Hao-mo?* that is to ſay, are you well in Health? And then aſked us ſeveral Queſtions in the *Tartarian* Language, concerning the Height of theſe Mountains, to which I anſwered alſo in the ſame Language; after which, turning to the Lords that were about him, he diſcourſed with them concerning us in very obliging Expreſſions, as I learned the ſame Night from the Prince his Unkle, who was then by his ſide.

He teſtifyed alſo his Affection to us, by cauſing often Meat to be carry'd to our Tents from his own Table, willing alſo that on ſome Occaſions we ſhould eat in his; and every time he did us this Honour, he had a regard to our Days of Abſtinence, and of Faſting, ſending us only ſuch Meats as we could uſe.

The eldeſt Son of the Emperor, after the Example of his Father, gave us Marks alſo of his Bounty, for having been conſtrained to ſtay more than 10 Days, by reaſon of a Fall from his Horſe, by which he was hurt in his right Shoulder; and one part of the Army

Army in which we were, having attended, whilſt the Emperor with the other, continued his hunting, he was not wanting in ſending to us daily, and ſometimes twice a Day, during this ſpace, Food from his own Table. In fine, we look'd on all theſe Favours of the Royal Family, as the effects of a particular Providence which watched over us, and over Chriſtianity, for which we had ſo much the more occaſion to thank God, for that the Affection of the Emperor was never ſo conſtantly ſhewn to the Grandees of the Empire, nor to the Princes of the Blood.

As to what relates to the other Particularities of our Journey, they are like to thoſe which happened to us the laſt Year, in the Journey to the Eaſtern *Tartary*, which I have fully deſcrib'd in my laſt Letter; that is to ſay, that we made uſe of the Emperor's Horſes, and of his Litters, that we lodged in the Tents, and eat at the Table of the Prince his Uncle, to whom he had particularly recommended us.

During more than 600 Miles, whichwe had paſſed in going and returning (for we did not return by the ſame Road) he cauſed to be made a great High-way croſs the Mountains and the Vallies, for the Queen Mother, who went in a Chariot; he cauſed alſo an infinite number of Bridges to be made over the Torrents, as alſo the Rocks to be cut, and the Points of the Mountains, with incredible Pains and Expences: Father *Grimaldi* ſhall deſcribe the other Particulars in his Letters.

As to the benefit which the Religion may draw from our Journey, I have ſpoken elſewhere; it ſufficeth to ſay that the Emperor, to whoſe Will we cannot make the leaſt reſiſtance, without expoſing all this Miſſion to a manifeſt Danger, has order'd us to follow him. I ceaſed not however to ſpeak twice to that Lord of the Court, who is our particular Friend, to excuſe us for the Time to come from theſe long Journeys, and eſpecially me, *who am not of an Age fit for it:* I tried to obtain at leaſt that they would be contented to take only one of us; the Letters of our Fathers were daily brought us during the Journey, and I had the Convenience of writing to them, by means of the Couriers which continually went to and came from the Royal City: I write all this in haſte, that I may continue to give you an Account of our Affairs.

An Explanation, neceſſary to juſtify the Geography *ſuppoſed in theſe Letters.*

IT may ſeem wonderful, that the Author of theſe Letters makes mention in his former, of a kind of War between the *Oriental Tartars* and the *Muſcovites*, notwithſtanding the extreme Diſtance theſe People appear to be from one another in our Geographical Charts; but thoſe who know how much the *Muſcovites* have extended the Bounds of the Empire along the *Tartarian* Sea, will judge the thing leſs difficult, beſides thoſe, who have ſeen theſe Countries, have made Diſcoveries much differing from thoſe which our Geographers have informed us of hitherto. Very lately *Monſieur D'Arcy*, who commands one of the King's Ships, in the Fleet of *Monſieur Le Mareſcal d'Eſtrees*, informed us, that having ſerved in *Poland*, and having been made Governor of a Place towards *Muſcovy*, the *Muſcovite* Ambaſſadors in their Return having paſs'd by him, and being by him treated in ſuch a Manner as put them into a very good Humour; one of them ſhewed him a Chart of the Countries between *Moſcovy* and *China:* And told him, that from three Cities which he ſhewed him, whoſe Names were *Lopſla*, *Abaſinko*, *Nerginsko*, all three

three under the Government of the great Dukes, tho' ſituated in the great *Tartary*, there was a Way to *Pekin*, which was not more than 25 or 30 Day's Journey. This Map it ſeems muſt be kept very ſecret in *Muſcovy:* For the next Day the *Muſcovite* was in Deſpair for having given it, ſaying, that if it ſhould be known, he ſhould come to great Damage. The Officer being come back ſince into *France*, has given a Copy to the King, and another to *Monſieur Le Marquis de Signelay*. To confirm this, it may be added, what a *Frenchman* has writ from *Muſcovy* within theſe two Months, that they are actually raiſing Troops to go to War with the *Chineſe*.

Some Obſervations and Conjectures concerning the Chineſe *Characters. Made by* R. H. *R. S. S.*

WHether there ever were any Language natural, I diſpute not: But that there have been, are, and may be, artificial Languages 'tis not difficult to prove. The *Chineſe* Court Language is ſaid to be of this kind, invented and ſpoken by the *Literati* and *Mandarines* throughout the whole Empire of *China*, differing from all the other Languages ſpoken in it, and I conjecture it to be nothing elſe but the Names of the Character by which they write and expreſs their meaning, arbitrarily impoſed by them, as we in *Europe* ſet names to Arithmetical Figures, not as we pronounce Words written with a literal Character. This I judge by comparing the Characters with the Names, Monoſyllables or Words they pronounce and read them with. Nor do they aſcend above a Monoſyllabical Name, tho' the Character be compoſed of many ſingle Characters, each of which hath its proper Senſe and Monoſyllabical Name, and though the Meaning of each Character be an ingredient in the Notion of that compounded Character.

I might

I might give an Inſtance alſo in the artificial Language invented by the late Reverend Biſhop of *Cheſter* Dr. *Wilkins*, which in all the Accompliſhments of Language doth excel any one yet extant; to which is alſo annexed a real Character, legible into that or any other Language ſpoken. By which Language the Character and every additional Mark is effable, and yet the Character is not literal but real, which is more curious and uſeful than the *Chineſe* Way. Great pity it is that Diſcourſe is not publiſhed in *Latin*, that the Learned of *Europe* may think of further improving it, and bringing it to Uſe.

But whatever we may judge of Language, 'tis paſt Diſpute that Writing was ever artificial, how anciently ſoever it were in uſe, and was the Invention of ſome thinking and ſtudious Men. 'Tis alſo evident that there have been various ways thought of for expreſſing ſignificantly, according to the ſeveral *Genii* of the Perſons that were the Inventors. As may be gueſſed by the *Ægyptian* Hieroglyphicks, the *Chineſe* Characters, the *Mexican* Chronology, and the literal Characters of ſeveral Nations, each of which ſeem to proceed upon differing Methods, and from differing thoughts of Invention.

Which of theſe Ways is the moſt ancient is hard to prove. The *Ægyptian Mummies* and *Obelisks* prove a great Antiquity of the Hieroglyphicks, but yet the *Chineſe* Chronology (if to be credited) outſtrips the *Ægyptian* in pretence to Antiquity. For the *Chineſe* make *Fohi*, the firſt King of *China*, to be

the Inventor of their Character: And account him to have lived 2950 Years before the Time of Chriſt, during all which time they pretend to have a certain and written Account in their Books: But their Account of the Times preceding, they eſteem more hypothetical and fabulous; depending chiefly upon Fiction and oral Tradition: As you will eaſily believe, when you underſtand how many Years they make it ſince the Creation of the World to the preſent Year 1686. which by the Account thereof in Mr. *Graves*'s Tranſlation of *Vulg. Beig.* will be found to be no leſs than eighty eight Millions ſix hundred and forty thouſand one hundred and two Solar Years, there having been run out ſince the Creation 8864 *Ven.* of Years (every *Ven.* containing ten thouſand ſuch Years) and of the preſent *Ven.* this Year 1686. is the 102d. Which Account is abundantly more extravagant than the *Ægyptian:* But this need not invalidate their Hiſtory ſince *Fohi*; by which it appears that their Character was invented before the Time of *Moſes* about 1400 Years, and even before *Menes* the firſt King of *Ægypt* about 500 Years. So that the *Chineſe* Invention of Writing or Characters, ſeems to be the moſt ancient of that kind. And the Book *Yekim* ſaid to be written by *Fohi*, the moſt ancient Book.

Theſe Accounts made me the more deſirous to underſtand ſomewhat of the Reality and Truth, of what is related concerning the Knowledge of Literature and manual Arts, which theſe People of *China* are ſaid to have poſſeſſed ſo long a Time in ſo great Perfection,

fection, and without Alteration from the primitive Inſtitution, eſpecially upon the Account of their Art of Printing, which gave a Hint to the Inventors of that admirable and moſt uſeful of all Inventions (for the Common-wealth of Learning) the Way of Printing here in *Europe*. For *Paulus Jovius* affirms, that the firſt Occaſion of that Invention in *Germany*, was a *German* Merchant, who returning out of *China* into his own Country, related what he had obſerved concerning the Practice of it as uſed in that Country. And tho' the *Chineſe* Way be wholly differing as to the Method of Compoſing, from what was invented and perfected here: Yet ſuch an intimation was enough to an ingenious Artiſt to improve the firſt Contrivance, and make it more accommodate to the literal Way of Writing with us: And as our Way may poſſibly be now brought to the greateſt Perfection for Exactneſs and Expedition, ſo without doubt muſt be their Way of Printing any thing juſt as it is written; ſince I find, that they can ingrave their Stamps for a Sheet, as ſoon as one of our Compoſiters can ſet and correct a Sheet of our literal Character; and when ſo done, one Man alone will print off 1500 Sheets in one Day. And though 'tis generally believed to be much the ſame with our Wooden Cuts for Printing, yet from ſome Obſervations I have made, I believe it to be much another way; of which I ſhall hereafter ſay more when I deſcribe their other Arts of Pottery, Staining, Varniſhing, *&c.*

By a *Chineſe* Manuſcript, out of which I tranſcribed the Lord's Prayer in the Year 1666 (when it was loſt) I found that the Pronunciations had no Affinity with the Stroaks of the Character. Whence I conceived it was either a numeral Character conſiſting of Numbers, or elſe a real Character, but not a literal, unleſs it were a literal Character of ſome other Language than that by which it was pronounced, whoſe Pronunciation is loſt though the Significancy be retained; as if one ſhould read what is written in *Hebrew* בראשית ברא into the *Latin* or *Roman* Language, *In Principio creavit*, inſtead of *Braſit bra*, or *Bereſith Bara*, according to the *Maſorethæ*.

Since that Time I procured from *China* a Dictionary of the Court Language, (as I found it written upon by the Perſon that ſent it me from thence) but this whole Book (which I found was printed) conſiſted only of the *Chineſe* Characters without any Interpretation, or Pronunciation; however by the help of the Pictures of that, and a *Chineſe* Almanack, I quickly found out their Characters for Numbers, and their Way of Numeration, together with the Figure and Uſe of their *Abacus* or counting Board, for performing the Operations of *Arithmetick*, which I find pretty near to agree with that of the ancient *Romans* (a Deſcription and Picture of which is given by *Urſinus*, *Pignorius* and *Velſerus*) ſave only, that, inſtead of Pins and ſliding Groves of the *Roman*, the *Chineſe Abacus* hath Strings or Wires and Beads, to ſlide upon them; and that, inſtead of four

Pins for Digits or Units, the *Chineſe* hath five Beads: So that it may ſeem to argue that the *Chineſe Abacus* was deſigned for a *Duodecimal* Progreſſion: Whereas that of the *Romans* was deſign'd for the *Decimal.*

One thing is remarkable in the *Chineſe*, that I find the *Abacus* to lie horizontal, and their firſt Place to be that next the left Hand, which I judge was alſo the firſt in their old Way of reading, much the ſame with ours, though their other Characters are erected (as I ſhall by and by ſhew) from the Poſture of Writing and Reading, which I conjecture they did at firſt make uſe of; and what does yet further agree with this Conjecture, is remarkable in the newly mentioned Treatiſe of *Vulg. Beig.* That whereas the Way of Writing and Reading uſed by the *Arabs*, was from the Right to the left, the firſt Place or the Place of Units in their Numeration, was that next the right Hand; and ſo came firſt to be read: As did that of *China*, who as I conceive read the contrary Way, from the Left to the Right.

It appears therefore by this Remark that we received this way of expreſſing Numbers from the *Arabians*, for that we keep the ſame Poſture or Poſition of Places with them, tho' our Progreſſion in Writing and Reading be the contrary Way. And though we now read them alſo in the Order they are ſet, twenty one, twenty two, thirty ſix, forty eight, *&c.* yet we retain alſo the other Way of Pronouncing, *viz.* one and twenty, two and twenty, ſix and thirty, eight and forty, *&c.*

Now

Now as the *Chineſe* and *Roman Abacus* do much agree, ſave only that they proceed contrary Ways; ſo doth their Way of expreſſing Numbers by Letters or Marks, one ſtroke or line ſignifying one; two lines two; three lines three; a Croſs ten; two Croſſes twenty; three Croſſes thirty; and ſo onwards to a Hundred, which they expreſſed by a ſquare Mark, and a Croſs with a Stroak added for a Thouſand, as will appear by the Table annexed. And though the Characters are not all the ſame; yet the Order and Method of one agrees very near with that of the other, eſpecially if I may be allowed my Suppoſition, that the primitive Way of writing and reading with the *Chineſe* was horizontal, and like the *Greek* and *Latin* or *European* Way. Now that theſe are properly numeral Figures, or Characters, is manifeſt from this, that they have alſo Word-Characters for every Number, and they can (in the ſame Manner as the *Romans* could) expreſs a Number by their numeral Characters or Marks, and by their literal or Word-Characters; for as one ſingle Stroak ſignifies one or the firſt, ſo does the Character (*in the Plate marked with E*) ſignify the ſame thing, that is, one or the firſt.

Having thus diſcovered their Characters for Numbers, and their Way of Numeration, I was next deſirous to underſtand ſomething concerning their Language and Character.

Upon peruſing all the Accounts I could meet with in Books, I found very little Satisfaction as to what I principally inquired after,

ter, which was firſt concerning the Method of the Character, whether it conſiſted of a certain Number of Marks methodically diſpoſed like Letters in a literal, or like Numbers in a numeral, or like Radicals in compoſite and decompoſite Derivations. 'Tis ſaid to be legible into a great many Languages conſiderably different one from another, but how this is effected is not related, only 'tis ſaid that the Marks are of the Nature of our Arithmetical Figures, (which are become almoſt Univerſal, at leaſt to us here in *Europe*,) and ſecondly, concerning the Number of theſe Characters. To which I found as little Satisfaction; for, by ſome Relations I found that there were 120000, by others 80000, and by others 60000. And that a Man muſt be able to remember to write and read at leaſt 8000, or 10000, before he will be able to expreſs his meaning thereby, and that it is the Buſineſs of a Man's whole Life to be throughly underſtanding in the whole Character; ſeeming to intimate that the Characters are immethodical, and there are as many primitive Characters as Words. Others tell us of various kinds of Characters which have been in uſe in ſeveral Ages. The firſt they ſay were *Hieroglyphical* like the *Ægyptian* or *Mexican*, conſiſting of the Pictures of Animals and Vegetables; but that the laſt are made up of Lines and Points, that they have no ſuch thing as Letters or Syllables, but every diſtinct Word and Notion has a diſtinct Character, and that all are primitive or incompoſite: So that if *Calepine*'s Dictionary were to be tranſlated into the *Chineſe*, 'twere neceſſary to have

have as many diſtinct radical Characters as there are Words therein to be found; which accounts do ſeem to inſinuate, that this Character is the moſt difficult, and the moſt perplexed Piece of Learning in the World, and depends wholly upon the Strength of the Memory, in retaining the Form and Signification of a perplexed Scraul. But whether they who gave us theſe Accounts did do it knowingly, is much to be doubted, my own Obſervations, at leaſt, make me think otherwiſe.

I have not yet been able to procure ſufficient Helps to inform my ſelf of the whole Art of writing and reading the *Chineſe* Character, and I fear the Relations I have hitherto met with concerning it, were written by ſuch as did not well underſtand it; however from ſuch Helps as I had, what I collected or do conjecture, I ſhall here relate. The beſt Help I had, was the peruſal of ſome Books printed in *China*, with the Pronunciation and Signification of the Character in *Latin* Letters. By theſe Books then I obſerved, firſt, that every one of their Characters, whether conſiſting of more or fewer Strokes or Marks, were compriſed within a certain ſquare Space, which is proportion'd according to the Bigneſs of the Size or Manner of writing, they deſign there to make uſe of; not that the whole Square is filled with every Character, but that no Part of that Character does exceed the Limits of that Square; ſo that tho' the Character have but one Stroak, it takes as much room in the Line as another that hath 20 or 30 ſeveral Marks; ſo that their Characters

racters are moſt exactly ranged in Rank and File, not unlike our Numbers in Arithmetick.

Notwithſtanding which I find they do vary the Bigneſs of the Character upon ſeveral Occaſions, as in the Titles of Books, in the Titles of the Chapters or Sections, in the Comments, Explications or Notes, and upon ſeveral other Occaſions of Variety, which they do at Pleaſure with their Pencil, as we uſe variety of Letters in the Printing of a Book. The Titles of Books are generally in very large Characters, 6 or 8 times as big as thoſe of the Book, the explication Notes $\frac{1}{2}$ of the Bigneſs, the Contents uſually twice as big, and the like Variety on ſeveral other Occaſions. I have met with alſo three ſeveral kinds of Characters, the moſt uſually twice as big, and the like variety on ſeveral other Occaſions. I have met with alſo three ſeveral kinds of Characters, the moſt uſual is the fixed or ſet ſquare Form. The ſecond Sort is the running Hand, in which the Orders of the Courts are written by their Secretaries, of which I have ſeen 3 or 4 kinds, in which the Pencil is never taken off, till the whole Character be finiſhed, and ſometimes two or three are all written without a break. The third ſeems to be ſomewhat like the flouriſhing great Letters, uſed by Scriveners at the Beginning of Deeds, and by the *Germans* in the Beginning of Chapters and Sections. They are compounded of the ſame Strokes as the ſet Character, but modulated and ſhaped a little otherwiſe, to make them appear the more beautiful and regular. A

Specimen

Specimen of each of theſe three are in the Plate. This third is made uſe of for Epitaphs, and other Inſcriptions on Buildings or Monuments. Theſe three Sorts I may call the three general kinds of Writing, but there is to be found an almoſt infinite Variety of Forms which Men uſe. This will be the more eaſy to be believed, when we conſider that the printed Characters are exactly the ſame with the written; inſomuch that every variety in each Stroke, Line or Point, that is or can be made with the Pencil, is perfectly expreſſed in the Impreſſion; and the Form, Mode, or Hand, as we call it, of every Writer, is exhibited ſo curiouſly, that I think it hardly poſſible to be performed after the Way of wooden Cuts, as Authors affirm it is; but muſt be done after the Method of our Copper Cuts, printed by a Roll-preſs, which the Way of expreſſing the Running or Court-Hand, does, I conceive, moſt evidently demonſtrate; and from divers Circumſtances, I could evidently make appear from the Book it ſelf, which I cannot ſo well expreſs in Writing. Their Paper is generally very thin and fine, and very tranſparent, but brown, ſo that whatever is written or printed on it, is almoſt as legible on the Back, as on the Foreſide, which is of great uſe in the cutting of their Stamps. And thence they never write or print on both Sides of the ſame Leaf, but only on one; and to make the Leaf appear printed on both Sides, they double the Sheet with the printed Sides outwards, and putting the folded Part forward; they ſew, bind, or ſtitch together all theſe Sheets

with the cut Edges, and upon whole Sheets inſtead of ſingle Leaves; juſt in the ſame Manner as the Plate annexed to this Diſcourſe is printed. They begin the Book on the Top of the right Hand Side of the Page that is next the right Hand, and they read downwards to the Bottom, then begin the next Line towards the left Hand at the Top, and ſo read to the Bottom, and ſo proceed to the End of the Book. But this I ſuppoſe not to be the primitive or the firſt Way of writing or reading. The Title of the Book is ſet firſt upon a whole Leaf, uſually of a thicker Paper, and ſome Title is likewiſe written upon the folding or edge of every Sheet, where is ſet alſo the Number of the Book, and the Number of the Sheet, half of which appears on one Side, and half on the other Side of the Fold.

As to the Character it ſelf, (I find by all the Books and Writings I have yet met with of that kind) that each of them is made up of a certain Number of Strokes, Lines or Marks, which are very diſtinct from each other in their Shape and Poſition; and by reaſon that theſe are ſingle Strokes, and as I conceive uncompounded, I think they may be called the Letters, Elements or Particles, out of which the more compounded Characters are conſtructed or contexed. Theſe are the firſt kind of which there are but a very few, and I think thoſe I have deſcribed in the thirteenth Line of the Plate are all.

Two, three, four, or more of theſe joined together in a certain Order and Contexture

ture (in the doing of which there is a great Regularity and Order obſerved, which is not varied from, and all within the regular ſquare Space) I conceive do make Syllables or primitive radical Characters, each of which have a primitive, ſingle or diſtinct Notion or Signification as well as Sound, which is made much uſe of in the more compounded Characters or Words. Of this kind I take the Figures of the Numbers to be: If at leaſt they are not ſingle Letters like the Way of expreſſing Numbers in the *Hebrew*, *Greek*, *Arabick*, &c. Languages, for though there may be two or three of the ſingle Strokes joyned together into a compound Character, it hinders not, but that it may ſtill ſignify a Letter, as in the *Greek* ΔΔ. Δ. Ι. Γ. Π. Γ. In the Runick; where every Letter hath one upright Line and ſome other additional Marks: In the *Roman* I. L. F. E. O. Q. V. Y: Or it may ſignify a Syllable as in the *Æthiopick*, and in the *Hanſcret*, and *Sunſcrit* Languages and Characters: The firſt of which being the *Brackman's* Character we find in *P. Kercher's China Illuſtrata*, deſcribed by *P. Roth*, who ſtudied it ſeven Years; and the ſecond (being a literal Character uſed over all *India* by the Merchants) I have ſeen in a Tranſcript, brought lately out of *India* by a very worthy Gentleman, who lived there many Years, and had the Curioſity to cauſe to be tranſcribed and tranſlated alſo into Engliſh, a Dictionary of their Language in their own Character: Who did me the Favour to let me peruſe it.

In

In which Characters or ways of Writing a Vowel is always join'd with a Conſonant into one compound Character to make it effable. And then the ſingle Strokes may be taken for ſingle ineffable Letters as are the Conſonants, and the Compoſition of two or three (of which at leaſt one may be a Vowel) will make Syllables.

Of this kind, there are not ſo many in the whole *Chineſe* Character, but that it will be eaſy enough to aſſign each a proper Monoſyllable which ſhall only have one or two Conſonants, and one or two Vowels; that is, the Conſonants together, and not ſeparate, either both behind the Vowel or Vowels, if it be a Dipthong, or both after it or them.

Of this kind, I underſtand there are about 500, probably 8x8x8, or 512. I could enumerate a great many, and give you alſo the Name or Words by which they are pronounced, as alſo their Signification, but (as I ſaid before) firſt, I conceive the preſent *Chineſe* Language to have no Affinity at all with the Character, the true primitive, or firſt Language, or Pronunciation of it, having been loſt. And ſecondly, I want ſome further Help to make a full and compleat Diſcovery: What I have learned from the Book of *Fohi* I ſhall give the next Opportunity; which will explain the Reaſon of the Multiplication of 8, and the Order and Method of Places in the Letter or Word Square.

The third Sort of Characters, is a decompounded Sort being made up of two, three or more of thoſe of the ſecond Kind, diminiſh'd proportionably in their Size, either as to their

length, or breadth, or both, from what they have in the ſame Writing when they are ſingle and fill up the whole Letter Square or Words Square. For there being ſeveral of them to be crouded together within the ſame Square, according as there are more in Number, ſo they are always more ſqueezed together. In this decompound Sort, there is a regular Order obſerved in the placing of the ſeveral Characters of the ſecond Sort; there being ſome that are always on the left Side, ſome always on the Right, ſome at the Top, ſome at the Bottom. Of which I doubt not but that they have a certain regular Method, which had we Dictionaries explained, would be eaſy enough to be diſcovered.

This Method alone of crouding together all the Characters (how many ſoever go to make up the decompounded Character) into one Square (which is of the ſame Size for the moſt ſimple and for the moſt compound) ſeems to be the great Singularity, by which the *Chineſe* Characters differ from thoſe of all the reſt of the World. And this I conceive has been the Reaſon why all People, and poſſibly even the very *Chineſe* themſelves have, and do believe it to be a real and not a literal Character: For if the primitive Language, or Pronunciation of the Characters be loſt (as I conceive it is) and that the Diſpoſition, Order, Method, Texture, or Manner of placing the more ſimple in the more compound Characthers be alſo loſt, forgotten, or not underſtood; then the whole Characters become a real and not a literal Character: And an immethodical one to ſuch as want a Method, that muſt be

learned by Rote, and depend wholly upon the Strength of the Memory to retain it. But I conceive it might be at firſt either a literal Character, and ſo the whole ſquare Character was compoſed of ſo many diſtinct Letters or Syllables, which compoſed the Word ſignified thereby; and ſo there might be a regular Order of placing theſe Letters in the Character, that is, that the whole Square being divided into ſo many Parts, there was a Rule which was the firſt, ſecond, third and fourth Place: So that there being placed in thoſe the ſeveral Letters that made up the Word, according to the Order they had in the Word, it was eaſy by that Rule to decypher the ſaid Character, and thence to find the Word and the Signification, as regularly as if the Letters had been written one after another, as moſt other literal Characters we know are at this Day written.

Or Secondly, it might be a real Character conſiſting of divers Marks or Letters, that expreſſed ſo many ſimple Notions, ſeveral of which joined together might make up the more compounded Characters, of which I have added ſome Examples in the Plate, which may be alſo made literal and pronounceable, tho' that Conſideration were not made uſe of, when they were firſt invented. What things I have obſerved in my *Chineſe* Books that ſeem to reſpect this Method, I will give more Particulars of by the next Opportunity, by printing a Specimen of the Book *Ye-Kim*, which explicated by theſe Notions will I conceive appear more intelligible, than by the Accounts we find given of it by the *Chineſe*

Commentators, and thoſe that have tranſlated them into *Latin*, who ſeem not to have underſtood the true Deſign thereof: For both the *Chineſe* and *European* Commentators aſſert it to be a Conjuring Book, or a Book to tell Fortunes by, and to be made uſe of by the *Chineſe* for that Purpoſe; whereas by the ſmall Specimen I have ſeen of it, I conceive it to contain the whole Ground, Rule or Grammar, of their Character, Language and Philoſophy, and that by the underſtanding of it, the Foundation and Rule of their Language and Character may be without much Difficulty decyphered and underſtood.

The preſent Uſe of this Character, I conceive to be differing from what it was at firſt, both as to the Poſition of Writing and Reading it, and as to the Expreſſion and Pronunciation thereof.

For the Way of writing and reading it, I conceive might at firſt be exactly the ſame with that of the *Greeks*, *Romans*, *Engliſh*, and all other *European* Nations, and alſo the *Æthiopick* and *Coptick*. That is, they began at the Top of the Page towards the left Hand, and ſo proceeded towards the Right in the *horizontal* Line to the End of it, and then began at the left End of the next Line under the firſt, and proceeded with that in the ſame Manner, and ſo with the next under that and all the remaining. Continuing to write the Words of the Line towards the right Hand, and the Lines of the Page one under another till the whole Diſcourſe were compleated, joyning Leaf to Leaf one under another, after the ſame Manner as the Rolls

are at preſent writ, and as the *Volumina* were of the Ancients. And to make the Parts of the Volume to be the more eaſily to be come at, without the Trouble of rolling and unrolling as the ancient *Romans* did, and we do with our Rolls, they contrived to fold them, like the Folds of a Fan, forwards and backward: And ſo ſtitching them together, that the written Sides might lie outwards, and open freely one from another, and the fair Sides might meet together, it came to make the preſent Form of their Book, which being laid as we generally place our Books before us, they ſeem to begin at the Top of the Page on the right Hand, and to proceed to the Bottom, and then at the Top of the next Line towards the left Hand, and deſcend as in the former; proceeding in this Order with all the reſt, which Way muſt needs be very inconvenient for Writing, however they may uſe their Pencil differing from our Pen. Tho' there be a way of writing from the Top to the Bottom of the Page, which is very convenient for writing the *Syriack*, as alſo for writing *Latin*, *Engliſh*, or *Greek*, where the writing is to be uſed for cutting the Stamps of Wood, or graving of Copper Plates with the ſame Character for printing, in which Caſes the Letters muſt be written backwards.

Secondly, As to the Pronunciation of this Character, by the Court Language, or by any other now uſed, I conceive it to be wholly differing from that of a literal Character, that is from being pronounced or ſpoken according to the Marks or Figures thereof,

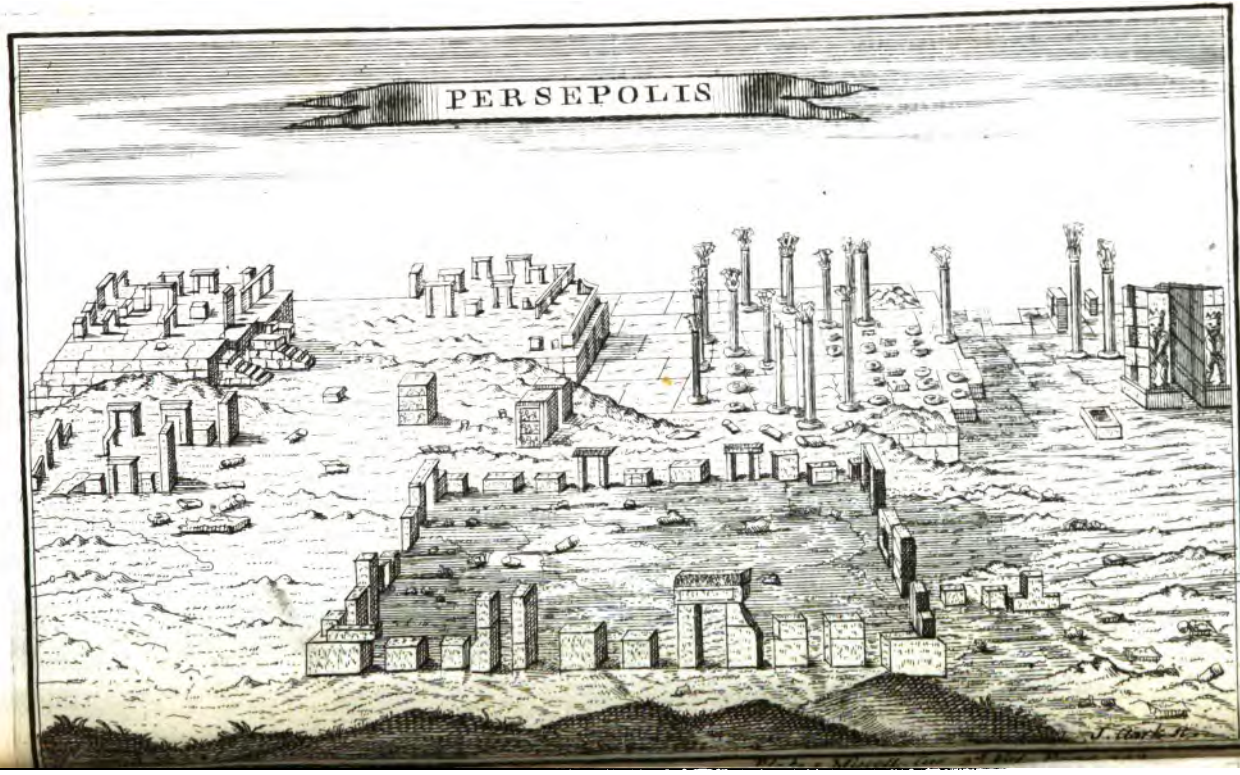
written, may be as much differing from what it was 2000 Years since, as an arbitrary one now invented, and grounded on the Letters, might possibly be. And such an arbitrary Pronunciation, if generally agreed upon, might serve *as well* for a Help to learn the Signification of Words, or *Word Combination* of Characters, as if we now knew the exact primitive Pronunciations, as critically as the *Masorethæ* are said to have done that of the *Hebrew*; and possibly also a *much better*, for that by such a one a great many Irregularities and Difficulties of Pronunciation (which are to be found in all Languages now spoken) might be omitted, and the whole made exactly regular and easy, as might be shewn in the *Hebrew* and *Greek*, and especially in the *Arabick*, whose Difficulties are sufficiently manifested by *Alphabetum Arabicum*, printed at *Rome* 1592. Now as by such a Language the Character might be made effable without musical Tones or difficult Aspirations, so had we Dictionaries of the Signification of the Characters, we might as soon learn the *Chinese* Characters, as we can *Latin*, or any other Language to be learn'd by Book, and not by speaking.

IMPRIMATUR,

John Hoskyns Vice P. R. S.
July 17th 1686.

A

7


PERSEPOLIS

A Letter from F. A. *Eſq; R. S. S. to the Publiſher, with a Paper of Mr.* S. Flowers, *containing the exact Draughts of ſeveral unknown Characters, taken from the Ruins at* Perſepolis.

SIR,

I Here ſend you ſome Fragments of Papers put into my Hands by a very good Friend, relating to antique and obſcure Inſcriptions, which were retrieved after the Death of Mr. *Flower*, Agent in *Perſia* for our *Eaſt-India* Company; who, while he was a Merchant at *Aleppo*, had taken up a Reſolution to procure ſome Draught or Repreſentation of the admired Ruins at *Chilmenar*, purſuant to the third Enquiry for *Perſia*, mention'd in the *Philoſophical Tranſactions*. pag. 420. viz. *Whether there being already good Deſcriptions in Words of the excellent Pictures and* Baſſe Relieves *that are about* Perſepolis *at* Chilmenar, *yet none very particular, ſome may not be found ſufficiently ſkilled in thoſe Parts, that might be engaged to make a Draught of the Place, and the Stories there pictured and carved.* This Deſire of the Royal Society, as I believe, it hinted at a Summary Delineation, which might be

be performed by a Man qualified in a few Days, taking his own Opportunity for the avoiding much Expence, (which you know they are never able to bear: So I cannot but think Mr. *Flower* conceived it to be a Buſineſs much eaſier to perform than he found it upon the Place, where he ſpent a great deal of Time and Money, and dying ſuddainly after, left his Draughts and Papers diſperſed in ſeveral Hands, one part whereof you have here, the reſt it's hoped may in ſome Time be recovered, if Sir *John Chardin*'s exact and accurate Publication of the entire Work do not put a Period to all further Curioſity, which I heartily wiſh.

An exact Draught or Copy of the ſeveral Characters engraven in Marble at the Mountains of Noctureſtand *and* Chahelminar *in* Perſia, *as they were taken in* November 1667. *By Mr.* S. Flower.

N. 1. *N.* 2. Theſe two Characters are engraven on the Breaſt of two Horſes cut out of the Mountain of Black Marble at *Noctureſtand*, diſtant a League from *Chahelminar*, or the ancient *Perſepolis*, one whereof is ſaid to be *Alexander*'s, the other *Ruſtram*'s, (a famous Hero ſuppoſed to have lived about the Time of *Cambyſes*.) Mr. *Flower*.

N. 1. This Character hath ſome Similitude with the ancient *Hebrew*, but the *Perſians* would have it their own, tho' they underſtand not a Letter. Mr. *Flower*.

N. 2. In theſe Lines the Places are prickt where the Letters were defaced and not perceptible. Mr. *Flower*. *N.* 3. Theſe

N. 3. Theſe two Lines were writ entire on *Ruſtram*'s Horſe. Mr. *F.*

N. 4. This is the (*Arabick*) *Perſian* Character engraven at *Perſepolis* not above 500 Years ſince, and is little different from the Writing us'd at this Day. Mr. *F.*

N. 5. This Character, whether it be the ancient Writing of the *Gaures* or *Gabrees*, or a kind of *Teleſmes*, is found only at *Perſepolis*, being a Part of what is there engraven in White Marble, and is by no Man in *Perſia* legible or underſtood at this Day.

A learned Jeſuit Father, who deceaſed three Years ſince, affirmed this Character to be known and uſed in *Ægypt*. Mr. *F.*

It ſeems written from the left Hand to the Right, and to conſiſt of Pyramids, diverſly poſited, but not joined together. As to the Quantity of the Inſcriptions, *Herbert* reckon'd in one large Table twenty Lines of a prodigious Breadth. Of this Sort here are diſtinct Papers each of ſeveral Lines.

N. 6. This Character is likewiſe engraved at *Perſepolis*, of the like Antiquity with the former. It has ſome Affinity with the *Syriack* and *Arabick*, and has been pretended to be underſtood by ſome of the *Padrees*. Mr. *F.*

A Letter from Monſieur N. Witſen *to Dr.* Martin Liſter, *with two Draughts of the famous* Perſepolis.

THIS ingenious and inquiſitive Gentleman having already often obliged the World with Communications of his Diſcoveries, lately ſent the following Letter with the Draughts to Dr. *Liſter*, who was pleaſed to permit their Publication in theſe Tracts: The Greatneſs of the Curioſity we hope will recommend them to the Lovers of Antiquity, little of thoſe famous Remains having been yet publiſhed, and thoſe that have been, but ill deſigned or graved. Monſieur *Witſen*'s Letter, tranſlated from the *French*, is as follows.

SIR,

SInce I had the Honour of receiving your laſt, there came to my Hands ſeveral curious *Shells* from you, with a Piece of *Engliſh Agate*, and the Tranſactions of the Royal Society for the Month of *June* laſt, for which Favours I return my humble Thanks. As to the Cockles of the *Caſpian* Sea, and from the Mouth of *Wolga*, I have Advice from *Moſcow*, that they are expected there this Winter: Mean while I herewith ſend you ſome *Snail-Shells*, taken out of the River *Joute*, not far from

ⲧⲟⲩⲣⲟⲧⲟ ⲛⲣⲟⲥⲱⲛⲟⲛ ⲇⲓⲟⲕⲏⲥⲉⲱⲥ

TOYROTO NPOCWNON DIOCECOY

ⲙⲡⲉⲓⲣⲉ ⲉⲧⲛⲁⲩ ⲉⲣⲁⲧⲟⲩ ⲛⲥⲁ ⲡⲓⲉⲣⲉⲩⲥ ⲙⲡⲓⲥⲕⲟⲡⲟⲥ ⲛⲧⲉ ⲧⲟⲩⲣⲟⲧⲟ ⲛⲣⲟⲥⲱⲛⲟⲛ ⲇⲓⲟⲕⲏⲥⲉⲱⲥ

ⲡⲉⲓⲣⲉ ⲉⲧⲛⲁⲩ ⲉⲣⲁⲧⲟⲩ ⲛⲥⲁ ⲡⲓⲉⲣⲉⲩⲥ ⲙⲡⲓⲥⲕⲟⲡⲟⲥ ⲛⲧⲉ ⲧⲟⲩⲣⲟⲧⲟ ⲛⲣⲟⲥⲱⲛⲟⲛ ⲇⲓⲟⲕⲏⲥⲉⲱⲥ

E
N
S
W

from the City of *Moſcow*. Our Apothecaries make uſe of them powdered, and probably for the ſame Purpoſe as *Crabs-Eyes*. There are ſome others likewiſe which are found in the Rivers of *Moſcow* and *Neglina*, and in the *Wolga*. Since you have been pleaſed to communicate to me an Inſcription found at *Perſepolis*, I thought it would be acceptable to ſend you the Draughts of Part of the Ruins of the Stone-work of that proud Palace, given me by the Perſon himſelf that drew them upon the Place. I ſhould be much ſatisfied had I any thing worthy of your Curioſity and the Publick, which you ſo often oblige with your Diſcoveries, which juſtly merit mine and the Thanks of all that eſteem them as much as my ſelf, who am the Cheriſher of your Friendſhip, and deſirous to ſhew that I am,

SIR,

Your moſt Humble and Obedient Servant,

Amſterdam, Jan. 1. 1694. N. Witſen.

A Deſcription of the Diamond-mines, as it was preſented by the Right Honourable the Earl Marſhal of England, *to the* Royal Society.

THE Parts of the World known to contain *Diamonds*, are the Iſland *Borneo*, and the Continent of *India extra & intra Gangem: Pegu* is likewiſe reported to have ſeveral; but the King not potent, his Country being but thinly inhabited, contents himſelf with his Mines of *Rubies*, *Saphires*, *Topaſſes*, *Emeralds*, *Gold*, *Silver*, *Braſs*, *Tinn* and *Lead*, and ſeveral other Commodities his Country affords, in great Plenty, rather than to ſuffer new Enquiries to be made, leſt the Diſcovery of ſuch an additional Treaſure ſhould invite ſome of his Neighbours, more potent, to invade him. But leaving the Deſcription of other Places to thoſe that know them better, I ſhall only keep my ſelf to the Coaſt of *Coromandel*, with which I am acquainted, and having viſited ſeveral of its Mines, am able to ſay ſomething thereof experimentally.

The Diamond-Mines in theſe Parts are generally adjacent to Rocky-hills, or Mountains, whereof begins a great Ledge or Range near *Cape Comorin*, extending in Breadth about 50 *Engliſh* Miles, ſome conjoyning, others ſcattered:

ſcattered: And running thence in length quite through *Bengala*. In, among, and near theſe Hills, in ſeveral Places, are known to be (as it's believed moſt of them have) Mines; many of them are poſſeſſed by petty Princes, or *Rajaes*, of the *Hundues*; ſome driven thither for Shelter by the *Moors*, who have taken the greateſt Part of their Country from them; others never overcome, as the *Rajaes*, on the Hills in and near *Bengala*, who admit of little or no Commerce with their Neighbours, or Paſſage through their Country, which (being barren, in few Places affording good Water, the Ways craggy and very toilſome, eſpecially to an Army) the *Moors* covet not, but let them enjoy it peaceably; yet to prevent Danger, they forbid digging (as the King of *Pegu* does) or dig ſome few Mines only very privately, ſo that a great Part of the Mines are unſearcht and concealed. But the Kingdoms of *Golconda* and *Viſiapore* contain in them ſcope enough of Ground, known to have Mines ſufficient to furniſh all the World plentifully with Diamonds; but their Kings permit digging only in ſome Places appointed, leſt, as it is imagined, they ſhould become too common; and withal for fear of tempting the threatning Greatneſs of *Aurenge Zebe*; forbidding alſo thoſe Places that afford the largeſt Stones, or elſe keeping Workmen in them for their own private Uſes: So that but a very ſmall Quantity in Compariſon of what might be, and thoſe only of ordinary Size, are found.

In the Kingdom of *Golconda* (as near as I can gather from the beſt acquainted) are 23 Mines

Mines now employed, or that have been ſo lately, viz. *Quolure*, *Codawillicul*, *Malabar*, *Buttephalem*, *Ramiah*, *Gurem*, *Muttampellee*, *Currure*, *Ganjeeconeta*, *Lattawaar*, *Jonagerree*, *Pirai*, *Dugulle*, *Purwille*, *Anuntapelle*, *Girrogeta*, *Maarmood*, *Wazzergerre*, *Munnemurg*, *Langumboot*, *Whootoor*, *Muddemurg*, and *Melwille* or the new Mine.

Quolure was the firſt Mine made uſe of in this Kingdom. The Earth is ſomething yellowiſh, not unlike the Colour of our Gravel dried; but whiter in ſome Places where it abounds with ſmooth Pebbles, much like ſome of thoſe that come out of our Gravel-pits in *England*. They uſe to find great Quantities in the Vein, if it may properly be ſo called, the Diamonds not lying in continued Cluſters as ſome imagine, but frequently ſo very ſcattering that ſometimes in the Space of $\frac{1}{4}$ of an Acre of Ground, digged between two or three Fathoms deep, there hath been nothing found; eſpecially in the Mines that afford great Stones, lying near the Superficies of the Earth, and about three Fathoms deep; deeper they could not dig for Water, it being in a Vale near a River. In other Places the Earth is mixt with rugged Stones, where they ſeldom mine deeper, though in higher Ground, before the Colour of the Earth alters, and the Vein ceaſes; which they give a Gueſs at by the ſmall Stones they find in the Earth, the principal Guide they have in the Diſcovery of the Mines.

The Diamonds found in theſe Mines are generally well-ſhaped, many of them pointed

ed, and of a good lively white Water; but it alſo produces ſome *yellow* ones, ſome *brown*, and of other Colours. They are of ordinary Sizes, from about ſix in a *Mangelin** (of which they find but few) to five or ſix *Mangelins*, each; ſome of 10, 15, 20. they find but rarely. They have frequently a bright and tranſparent Skin, inclining to a greeniſh Colour, though the Heart of the Stone be purely white; but the Veins of theſe Mines are almoſt worn out.

* *A* Mangelin *is four Grains in Weight, ſaith* Linſchoten.

The Mines of *Codawillicul*, *Malabar*, and *Buttepallam* conſiſt of a reddiſh Earth, inclining to an Orange-colour (with which it ſtains the Cloaths of the Labourers that work in it) they dig about four Fathom deep. They afford Stones generally of an excellent Water and cryſtalline Skin; ſmaller ſizes than thoſe of *Quoloure*, *Ramiah*, *Gurem*, and *Muttampelleo*; have a yellowiſh Earth, like *Quoloure*; their Stones like thoſe of the two former Mines, but mixt with many of a blue Water. Theſe five Mines being under the ſame Government with *Mellwillee*, where the Governour reſides; He to draw the Adventurers and Merchants near him, that he may be better informed of the Actions and Advantages, and know the better how to fleece them, the general Practice of Governours in theſe parts, has very lately forbid their uſe; and commanded all to repair to his Reſidence, which they muſt obey, or fly into another Government..

The next Mine in our way is *Currure*, the moſt famous of them all and moſt antient.

It has been under Subjection of the King of *Golconda*; but about 25 Years, taken, with the Country of *Rarnaticum*, from the *Hendue-Rajaes*, about that time, by the *Nabob*, *Meer*, *Jumla*. In it have been found Diamonds of a *ſize* weight, which is about 9 Ounces *Troy* or 81½ *Pagos* weight. It is only employed by the King for his own private uſe: The Diamonds that are found in it, are very well ſpread, large Stones (it yields few or none ſmall,) they have generally a bright Skin, which inclines to a pale greeniſh Colour, but within are purely white. The Soil is reddiſh as many of the others.

About ſixty or ſeventy Years ago, when it was under the Government of the *Hundues*, and ſeveral Perſons permitted to adventure in digging, a *Portugueze* Gentleman went thither from *Goa*, and having ſpent in Mining a great ſum of Money, to the amount of 100000 *Pagos*, as 'tis reported, and converted every thing he brought with him, that would fetch any Mony, even to what wearing Cloaths he could ſpare, while the Miners were at work for the laſt Day's Expence, he had prepared a Cup of Poyſon, reſolving, if that Night he found nothing, to drink his laſt with the Concluſion of his Mony; but in the Evening the Workmen brought him a very fair ſpread Stone of 20 *Pagos* weight, in Commemoration whereof he cauſed a great Stone to be erected in the place, with an Inſcription engraven on it, in the *Hundues* or *Tellinga* Tongue, to the following effect, which remains to be ſeen to this Day;

Your Wife and Children ſell, ſell what you have,
Spare not your Cloaths, nay, make your ſelf a Slave;
But money get, then to CURRURE *make haſt;*
There ſearch the Mines, a Prize you'll find at laſt.

After which he immediately returned with his Stone to *Goa*.

Not far from *Currure* are the Mines of *Lattawaar* and *Ganjeconta*, which are in the ſame Soil as *Currure*, and afford Stones not unlike: But *Lattawaar* hath many repreſenting the great end of a Razor-blade, thin on one ſide and thick on the other, very white and of an excellent Water; but the beſt of the Mine is worn out, and *Ganjeconta* employed only to the Kings private uſe.

Jonagerre, *Pirai Duguelle*, *Purwillee* and *Anuntapellee*, conſiſt alſo of red Earth, are now employed, and afford many large Stones; part of them of a greeniſh Water; but the moſt abſolute Mines are of *Wazzergerre* and *Munnemurg*, (the other rather repreſenting Pits than Mines;) for there they ſink through high Rocks till they go ſo far below their Baſis, that they can go no further for Water, in ſome places 40 or 50 Fathom deep. The Superficies of the Rocks conſiſt of hard, firm, white Stone, into which they cut a Pit like a Well, of about 4 or 5, in ſome places 6 Foot deep, before they come to a Cruſt of a Mineral Stone, like the Mineral of Iron; when they fill the Hole with Wood and keep as hot a Fire as they can there for two or

three Days, till they think it ſufficiently heated; then they pour in Water till they have quencht it, which alſo ſlacks and mollifies both Stone and Mineral; both being cold, they dig again, take out all the crumbled ſtuff and dig up what they can beſides, before they heat it anew; The Cruſt ſeldom is thicker than three or four Foot, which ceaſing, they come to a Vein of Earth, that uſually runs under the Rock two or three Furlongs; ſometimes much further: This they dig all out and ſearch, and if their firſt Attempt prove ſucceſsful, they go to work again (digging after the ſame manner) as deep as they can, till they come to Water; for the drawing whereof, wanting the help of Engines, known in *Europe*, they can go no deeper, although the Vein lie lower; all Lumps of the Mineral they break in pieces, and frequently find Diamonds encloſed in them. To work on theſe Mines is very expenſive, but the Advantage is commonly anſwerable; yet in reſpect of the certain Disburſe, that muſt be before any thing be found, they are not ſo much frequented as others, where they may try their Fortunes with a ſmaller Stock. The Earth they dig out is red: Many large Stones are found here; the ſmalleſt about 6 in a *Mangelleen.* They are mixt Waters, but the greateſt part good, only of ill-favoured ſhapes, many cragged pieces of Stones, ſome as if they had been parts of very great ones, others with pieces broken off them; yet I never heard of any that ever found two ſeeming Fellows, although they do thoſe that look as if they had been newly broken.

In *Langumboot* they dig as they do at *Wazzergerree* and *Munnemurg*; The Rock is not altogether ſo ſolid, but the Earth and Stones it produces much alike.

Wootoor ſhould have been placed next to *Currure*, it lying near it and affording Stones of a like Magnitude, Shapes and Waters; 'tis employed only to the King's uſe: And ſingular, in that its Diamonds are found in black Earth.

Muddemurg far exceeds all the reſt for Diamonds of a delicate Shape, Water, and bright tranſparent Skin, proud, as it were, in diſcovering their inward Beauties, with which no other Mine can compare; yet it has alſo Store of veiny ones, but thoſe likewiſe of ſo curious Shape and Water, that it's difficult to diſcover them from the good, eſpecially the ſmall ones. It produces Stones of divers Magnitudes, from ten and twelve in a *Mangelleen*, to ſix or ſeven *Mangelleens* each, and beſides ſome great ones. The Earth is red, but it's ſeated in the Woods, and the Water ſo bad, that to all (except the People bred there) it preſently occaſions Fevers and deſtroys abundance, inſomuch that moſt of the Adventurers have forſaken it; notwithſtanding which it hath been more profitable than any of the reſt, the Vein frequently lying near the Superficies of the Earth, ſeldom running deep, and is better furniſht than any other yet diſcover'd. The River *Kiſhna*, of excellent Waters, is but 9 Miles diſtant; but the Miners or Merchants are either poor that they cannot, or elſe over-awed by the Governour, pretend to be and dare not

be at the Charges of fetching their Water from thence. Divers are of the Opinion, that, beſides the Water, the Town lying in a bottom, environ'd with Hills and Moraſs adjoyning, the Air may be infected, and contribute to its Unhealthfulneſs.

Melwellee or the *New Mine*, ſo called, becauſe it was but lately found out (or at leaſt permitted to be made uſe of) in the Year 1670. it had then a Year employed the Miners, but it was forbidden, and lay unoccupied till 1673, when complaint being made at *Quoleur*, that the Vein was worn out, the King again licenſed its Settlement. The Earth they mine in, is very red, and many of the Stones found there, have of it ſticking to them, as if it had clung there while they were of a ſoft glutinous Subſtance, and had not attained their Hardneſs, maintaining its Colour on its Skin (ſeeming to be roughned with it) that it cannot be fetch'd out by grinding on a rough Stone with Sand, which they make uſe of to clean them. The Stones are generally well-ſhaped, their Size from 5 or 6 in a *Mangelleen* to thoſe of 14 or 15 each, and ſome bigger; but greateſt Quantities of the middle ſorts: moſt of them have a thick dull Skin, incline to a yellowiſh Water, not altogether ſo ſtrong and lively as of the other Mines; very few of them of a cryſtalline Water and Skin. They are reported to be apt to flaw in ſplitting, which occaſions theſe People to eſteem them ſomething ſofter than the Product of many of the other Mines: Several that flatter by their ſeeming whiteneſs when rough: diſcover their Deceitfulneſs, ha-

having paſt the Mill, and too often a yellowiſh Tincture, to the Diſappointment and Loſs of them that have cut them; but what they want in Goodneſs, is in part ſupplied by the plenty they find, which, together with their Properties, make them the cheaper. This being what I have gathered, both by Experience of ſeveral of the Places I have ſeen, and the beſt Informations I could meet with, of the Mines in this Kingdom; I ſhall now proceed to thoſe in *Viſiapore*.

Viſiapore is known to contain Mines encloſing Stones as large and good as thoſe of *Golconda*; but the King for Reaſons already given, makes uſe but of the meaneſt: Whereby, as *Golconda* is famous for the Largeneſs of thoſe it affords, *Viſiapore* is noted for the ſmalleſt; whoſe Mines, though they ſeldom or never render an Adventurer a Fortune or Eſtate at once, as ſometimes thoſe of *Golconda* do, by a great Stone or ſeveral found together; yet they are more populous and better employed, the ſmall Stones lying thicker in the Earth, ſo that the generality are Gainers, and few but they get their Expence; whereas thoſe of *Golconda* dig away a conſiderable Eſtate and find nothing, others not their Charges, and where one is Gainer, divers loſe.

There are 15 Mines employed in the Kingdom of *Viſiapore*, viz. *Ramulconeta*, *Banugunnapellee*, *Pendekull*, *Moodawarum*, *Cumerwille*, *Paulkull*, *Workull*, *Lungeepoleur*, *Pootloor*, *Punchelingull*, *Shingarrampent*, *Tondarpaar*, *Gundepellee*, *Donee* and *Gazerpellee*.

In *Ramulconeta* Mines in red Earth, about 15 or 16 Foot deep they ſeldom find a Diamond of a *Mangelleen* Weight, but ſmall to 20 or 30 in a *Mangelleen*. They are generally of an excellent Cryſtalline Water, have a bright clear Skin, inclining frequently to a pale greeniſh Colour, are well ſhaped, but few of them pointed ones. There are alſo found among them ſeveral broken Pieces of Diamonds, by the Country people called *Shemboes*.

In *Banugunnapellee*, *Pendekul*, and *Moodawarum*, they dig as at *Ramulconeta*, and in the ſame kind of Earth; they alſo afford Stones much alike, being neighbouring Places.

Cummerwillee, *Paulkull*, and *Workull*, are not far diſtant, produce Stones much alike out of the ſame coloured Earth, but very ſmall ones, even to a hundred in a *Mangelleen*.

Lungepoleur Mines are of a yellowiſh Earth (like thoſe of *Quoleur*,) its Diamonds are generally well ſhaped, globular, few pointed, of a very good cryſtalline Water and bright Skins; Many of them have a thick dark Graſs-green Skin, ſome ſpotted alſo with black, that they ſeem all foul, yet are not ſo, but within purely white and clean. Their ſizes are from 2 or 3 *Mangelleens* downwards, but few very ſmall.

Pootloor Mines are of reddiſh Earth, but afford Stones much like thoſe of *Lungepoleur*, only ſmaller, under a *Mangelleen*; the general Sizes are of $\frac{1}{7}$, $\frac{1}{3}$, $\frac{1}{49}$, $\frac{1}{6}$ of a *Mangelleen*.

Pun-

Punchelingull, *Shingarrampent*, and *Toudarpaar*, are alſo of red Earth, their Diamonds not unlike thoſe of *Quoleur*, only rarely or never any large ones are found there.

Gundepellee hath the ſame Earth with the former, and produces Stones of equal Magnitude; but frequently of a pure cryſtalline Water, wherein they exceed the former.

Donee and *Gazerpelle* dig both in red Earth likewiſe, and afford Stones alike, the greateſt part whereof are of good Shapes and Waters. They have alſo many *Shemboes*, and ſome of bad Waters, ſome brown, which theſe People call ſoft or weak water'd, being eſteemed of a ſofter and weaker Body than others, by reaſon they have not ſo much Life, when cut, and are ſubject to flaw in ſplitting, and on the Mill; their general Product is in Stones of middle Sizes: But *Gazerpellee* has beſides many large ones, and is the only Mine noted for ſuch in the Kingdom of *Viſiapore*. With which concluding the Deſcription of the Mines, I ſhall give ſome Account how the Diamonds are found, and how they handle the Earth to find them; which is as followeth.

The Diamonds are ſo ſcatter'd and diſperſed in the Earth, and lie ſo thin, that in the moſt plentiful Mines it's rare to find one in digging, or till they have prepar'd the Stuff, and do ſearch purpoſely for them: They are alſo frequently enclos'd in Clods; and ſome of thoſe of *Melwillee*, the New Mine in the Kingdom of *Golconda*, have the Earth

Earth ſo fix'd about them, that till they grind them on a rough Stone with Sand, they cannot move it ſufficiently, to diſcover they are tranſparent; or, were it not for their Shapes, to know them from other Stones. At the firſt opening of the Mine, the unſkilful Labourers, ſometimes to try what they have found, lay them on a great Stone, and ſtriking on them with another, to their coſtly Experience diſcover they had broken a Diamond. One I knew who had an excellent Stone of 8 *Mangelleens*, ſerved ſo by ignorant Miners he employed.

Near the Place where they dig, they raiſe a Wall with ſuch rugged Stones as they find at Hand (whereof all the Mines afford Plenty) of about two Foot high, and ſix Foot over, flooring it well with the ſame; for the laying of which they have no other Mortar than the Earth tempered with Water. To ſtrengthen and make it tight they throw up a Bank againſt the ſide of it: In one whereof they leave a ſmall Vent about two Inches from the bottom, by which it empties it ſelf into a little Pit, made in the Earth to receive ſmall Stones, if by chance any ſhould run through. The Vent, being ſtopped, they fill the Ciſtern they have made with Water, ſoaking therein as much of the Earth they dig out of the Mines, as it can conveniently receive at a time, breaking the Clods, picking out the great Stones and ſtirring it with Shovels, till the Water is all muddy, the gravelly Stuff falling to the bottom; then they open the Vent, letting out the foul Water and ſupplying

it

it with clean, till all the earthly Subſtance be waſted away, and none but a gravelly remains at the bottom. Thus they continue waſhing till about Ten of the Clock before Noon, when they take the gravelly Stuff they have waſhed, and ſpread it on a place made plain and ſmooth (like a Bowling-Alley) for the purpoſe, near the Ciſtern, which being ſoon dried by the heat of the Sun at that time of the Day, they very curiouſly look it over, that the ſmalleſt bit of a Stone can hardly eſcape them. They never examine the Stuff they have waſh'd but between the Hours of Ten and Three, leſt any Cloud by interpoſing, intercept the briſk Beams of the Sun, which they hold very neceſſary to aſſiſt them in their Search; the Diamonds, not forbearing to reflect them when they touch therein, rendring themſelves thereby the more conſpicuous.

Some of the experteſt Labourers are employed in ſearching; he that ſets them at Work uſually ſitting by, and overlooking; but it's hardly poſſible, eſpecially where many are employed, to watch them ſo narrowly, but that they may ſteal part of what they find, as many times ſome of them do, and, ſelling it privately, convert to their own uſe. If they find a large Stone, they carry it not preſently to their Employer, but keep on looking, having an Eye on him till they obſerve he takes notice of it, when with a turn of their Hand they give him a Glimpſe of it, but deliver it not till they

they have done Work, and then very privately, it being the general Endeavour to conceal what they find, leſt it ſhould come to the Knowledge of the Governour of the Place, and he requires a Share, which in the Kingdom of *Golconda* is uſually practiſed, without reſpect to any Agreement made with them.

The Miners, thoſe that employ them, and the Merchants that buy the Stones of them, are generally *Ethnicks*; not a *Muſſulman*, that ever I heard of, followed the Employment. Theſe Labourers and their Employers are *Tellinga's*, commonly Natives of or near the Place. The Merchants are the *Banians* of *Guzzarat*, who for ſome Generations have forſaken their own Country to take up the Trade, in which they have had ſuch Succeſs, that 'tis now ſolely engroſſed by them; who correſponding with their Country-men in *Surrat*, *Goa*, *Golconda*, *Viſiapore*, *Agra* and *Dillee*, and other Places in *India*, furniſh them all with Diamonds.

The Governours of the Mines are alſo Idolaters: In the King of *Golconda*'s Dominions a *Tellinga Brammee* rents moſt of them, whoſe Agreement with the Adventurer is, that all the Stones they find under a * *Pagoda* Weight, are to be their own; all of that Weight and above it to be his, for the King's Uſe: But although this Agreement be ſigned and ſealed unto, he minds not at all the Performance thereof, but endeavours

* *A* Pagoda *Weight is nine* Mangelleens.

to

to engroſs all the Profit to himſelf, by tyrannically ſqueezing both Merchants and Miners, whom he not only taxes very high, but maintaining Spies among them of their own People, on the leaſt Inkling that they have been any ways fortunate, he immediately makes a Demand on them, and raiſes their Tax; elſe on a falſe Pretence they have found a great Stone, drubs them till they ſurrender what they have, to redeem their Bodies from Torment. Beſides, the Exciſe is ſo high on all ſorts of Proviſions, *Beetle*, and *Tobacco*, which to them is as abſolutely neceſſary as Meat, or at leaſt in their Eſteem, that it is thereby raiſed to double that Price they bear without the Government; and it is furniſh'd only by ſome licenſed Perſons; if any other ſhould endeavour to bring in the leaſt Quantity by Stealth, he is fin'd (even for one Leaf of *Tobacco*) if it be a Perſon of any Repute, or worth any thing, elſe very ſeverely drubbed for it; by which Courſe there is hardly a Man worth five Hundred Pound to be found among them, moſt of them dealing by Monies taken up at Intereſt of Uſurers, who reſide there purpoſely to furniſh them, who, with the Governour, eat up the Grains: So that one would wonder any of them ſhould ſtay, and not betake themſelves to Places where they might have better Uſage; as there are ſeveral in other Governments, and ſome few that have the Senſe to remove; but many their Debts, others hopes of a great Hit, detains. Both Merchant

chant and Miner go generally naked, only a poor Clout about their Middle, and their Shaſh on their Heads; they dare not wear a Coat, leſt the Governor ſhould ſay they have thriven much, are rich, and ſo enlarge his Demands on them. The Wiſeſt, when they find a great Stone, conceal it till they have an Opportunity, and then with Wife and Children run all away into the *Viſiapore* Country, where they are ſecure.

The Government in the *Viſiapore* Country is better, their Agreement obſerv'd, Taxes eaſier, and no ſuch Impoſitions on Proviſions; The Merchants go handſomly Clad, among whom are ſeveral Perſons of conſiderable Eſtates, which they are permitted to enjoy peaceably, by reaſon whereof their Mines are much more populous and better employed than thoſe of *Golconda*.

It is obſervable, that notwithſtanding the Agreement with the Adventurers of the Mines, that all Stones above a certain Weight ſhall be for the King's Uſe; yet in the Metropolis of either Kingdom, as the Cities of *Golconda* and *Viſiapore* are, there is no Seizure, all Stones are free, and the late deceaſed King, *Abdull Cutopſhaw* of the former, and *Edelſhaw* of the latter, would not only give very great Prices for large Stones, but richly Veſt, and preſent the Merchant that ſold them with Horſes or ſomething elſe of Value, thereby encouraging others to bring the like. But the preſent King of *Viſiapore* is

is a Child, and the King of *Golconda*'s Delight's ſolely placed on light Women-Dancers, and Trick-Shewers, that he neither minds *Diamonds*, nor many things more neceſſary; committing the Government of his Kingdom to a *Tellinga Braminee*, which the *Muſſulmen* not well reſenting, does in ſome meaſure threaten the Stability of his State.

A Letter from the Eaſt Indies, *of Mr.* John Marſhal *to Dr.* Coga, *giving an Account of the Religion, Rights, Notions, Cuſtoms, Manners, of the Heathen Prieſts commonly called* Bramines. *Communicated by the Reverend Mr.* Abraham de la Pryme.

Worthy Sir,

THE laſt time that I had the Happineſs to be in your good Company, and to partake of thoſe Favours and Bleſſings that your Goodneſs was pleaſed liberally to beſtow upon me and our Companions, at our Departure, and as it were Exile from our native Land, does ſo loudly call out for ſome Recompence or other at our Hands, that I cannot without the greateſt Ingratitude imaginable let ſlip this (tho' ſudden) Opportunity of Writing unto you, and preſenting of you at this time with what I underſtand you more value than all the Riches of the Eaſt; to wit, a few Specimens of the Knowledge of thoſe People whom we ſtile Barbarians, Heathens and Idolaters, which I have read in their

their own Books, and gather'd from the Mouths of those that have been the greatest Speakers and Preachers among them. I have always had a profound Veneration for the Dictates of Nature, and the universal Traditions of Nations, for hereby are infinite Things to be learned, for the establishing of our glorious Religion, against Atheists, and the more easy Propagation of the same among Infidels and Heathens.

Upon what Account or Grounds it is that some Travellers have stiled these People Polytheists, or Atheists, I cannot tell; or whether there be any such People at all in the World, except some of the base common Sort in all Nations, I much question. It is very observable here, that their Priests, or *Bramines*, and holy Men, whom they call *Jogees*, when they have Occasion to write any thing they always put a Figure of one in the first Place, to shew, as they say, that they acknowledge but one God, whom they say is *Burme*, that is, immaterial. When they preach to the People, and instruct them, which is commonly every Feast-day, full Moon, or the Time of an Eclipse of either Luminary, they tell the common People much of God, Heaven and Hell, but very imperfectly, obscurely and mystically. They say that when God thought of making the World, he made it in a Minute.

They account this World the Body of God, for all that they say he's immaterial; and say that the highest Heavens are his Head, the Fire his Mouth, the Air his Breath and Breast, the Water his Seed, and the Earth

and the Foundations thereof his Legs and Feet. But aſſert in general that God is the Life of every Thing, yet is the Thing neither greater nor leſs for him.

They hold that God dwelt in a Vacuity before that he created the World, and that as he dwelt in that Vacuity he created ſeveral Beings out of himſelf, the firſt were Angels, the ſecond Souls, the third Spirits, all differing in degrees of Purity, the firſt being more pure than the ſecond, and the ſecond than the third. The Angels, they ſay, neither act Good nor Evil, the Soul's either Good or Evil, but the Spirits, or *Dewta's* as they call them, act ſcarce any thing but Evil.

They have a good Opinion of the Angels, and think their State mighty happy, hoping that when they die they ſhall be made partakers of the ſame Bliſs and Pleaſure.

They believe that every thing that hath Life hath a Soul, but eſpecially Man; and they accordingly affirm, that as theſe Souls behaved themſelves in their pre-exiſtent State, ſo are their Actions in this World either good or bad, by a Sort of fatal Neceſſity, which is very hard to conquer, or to overcome. Hence it is, ſay they, that there are ſo many different Humours and Diſpoſitions of Men; for their Souls, before their Entrance into their Bodies, being tainted with different Affections, cauſes the like Differences in the Parties, whoſe Bodies are their Vehicles. So that if a Man happen to have a ſuddain or unfortunate Death, they immediately aſcribe the ſame

ſame to the Party's own Wickedneſs, or the bad Life that his Soul led before that it enter'd into his Body. For, ſay they, the afore-acted Evil that his Soul did in its other Life, brought theſe Accidents upon him, by getting the upper Hand of him, and by being too powerful and ſtrong. And thoſe that die thus, they believe that their Souls turn immediately into Devils. They maintain *Pythagoras*'s Tranſmigration, or *Metempſycoſis*, but in a groſſer Senſe than he did. For they believe that Men's Souls, that have not lived ſo well as they ought, go as ſoon as the Body dies not only into Birds and Beaſts, but even into the baſeſt Reptiles, Inſects and Plants, where they ſuffer a ſtrong Sort of Purgation, to expiate their former Crimes: But as for the Souls of the *Jogees*, or *Fuchees*, that is, of religious Men and Saints, they fancy that they go and inhabit with the good *Dewtas*, or Angels, among the Stars.

As for the Spirits, or inferior Angels, they believe that they are very evil, and have a Hand in all Wickedneſſes, Murders, Wars, Storms, and Tempeſts; ſo that when they ſolemnize the Funerals of thoſe that are dead, they always preſent Diſhes of Meat, as Offerings unto thoſe Spirits, and ſometimes ſacrifice unto them, that they may not hurt the Souls of the Dead.

As they acknowledge the Being of a mighty God, ſo they hold that he created the World, and every thing therein. They believe that there are almoſt infinite Numbers of Worlds, and that God has oftentimes annihilated and re-created the ſame. But how he came firſt

to create the World and Mankind, they relate to have been thus——Once on a Time (ſay they) as he was ſet in Eternity, it came into his Mind to make ſomething, and immediately no ſooner had he thought the ſame, but that the ſame Minute was a perfect beautiful Woman preſent immediately before him, which he called *Adea Suktee*, that is, the firſt Woman: Then this Figure put into his Mind the Figure of a Man; which he had no ſooner conceived in his Mind, but that he alſo ſtarted up and repreſented himſelf before him; this he called *Manapuiſe*, that is, the firſt Man; then upon a Reflection of theſe things, he reſolved further to create ſeveral Places for them to abide in, and accordingly aſſuming a ſubtil Body, he breath'd in a Minute the whole Univerſe, and every thing therein, from the leaſt to the greateſt.

They conſtantly believe that the Univerſe cannot poſſibly laſt longer than 71 *Joogs*, which is a Meaſure of Time with them, and is .... Years. Which when it is come, God does not only annihilate the whole Univerſe, but even every thing elſe, as well Angels, Souls, and Spirits, as inferior Creatures; and then he remains in the ſame State that he was in before the Creation; but ſay, that after he has a while reſpired thus he breathes again, and every thing is created afreſh, as well Angels and Souls, as all other things; but as for the Spirits, they are no more thought of. Yet for all this, after 71 *Joogs* more all is annihilated again. How many *Joogs* are paſt ſince the World was laſt created they cannot certainly tell; only 'tis obſervable that

in

in an Almanack of theirs, written in the *Sanſcript* Language in 1670, they make the World then 3892771 Years old from its laſt Creation.

The *Bramines* of *Perſia* tell certain long Stories of a great Giant that was led into a moſt delicate Garden, which upon certain Conditions ſhould be his own for ever. But one Evening in a cool Shade, one of the wicked *Dewtas*, or Spirits, came to him, and tempted him with vaſt ſums of Gold, and all the moſt precious Jewels that can be imagined; but he courageouſly withſtood that Temptation, as not knowing what value or uſe they were of: But at length this wicked *Dewta* brought to him a fair Woman, who ſo charmed him, that for her ſake he moſt willingly broke all his Conditions, and thereupon was turned out.

They tell a great many Stories abſurd and ridiculous enough, of the firſt Ages of this preſent World, which would be too tedious here to take notice of; only I ſhall here give you out of one of their own Books what they tell us of a great Flood that formerly happened. They ſay, that about 21000 Years ago the Sea overwhelm'd and drowned the whole Earth, except one great Hill, far to the Northwards, called *Bindd*, and that there fled thither only one Woman and ſeven Men, the Names of whom were, *Deboolah*, *Sunnuk*, *Sunnaud*, *Trilleek*, *Sannotah*, *Cuppyloſhaw*, *Suraſchah* and *Burroopung*; theſe underſtanding out of their Books that ſuch a Flood would come, and was then actually coming, prepared againſt the ſame, and re-

paired thither; to which Place alſo went two of all Sorts of Creatures, Herbs, Trees, and Graſſes, and of every thing that had Life, to the Number in all of 1800000 living Souls. This Flood (ſay they) laſted 120 Years, five Months and five Days: After which Time all thoſe Creatures that were thus preſerved, deſcended down again and repleniſhed the Earth: But as for the ſeven Men and Woman, only one of them came down with her, and dwelt at the Foot of the Mountain, the other ſix turned *Fuchees*, or holy Men, and ſpent there the remainder of their Days.

They hold in general the *Ptolomaic* Syſtem of the Univerſe, and ſay that there are eight or nine Heavens, counting the Air and Earth, every one exceeding another in Beauty and Glory.

Their Religion conſiſts of nothing that I could ever ſee or learn, but the leading of a pure Life, the waſhing away of their Sins in the River *Ganges*, their muttering over of divers Prayers, and their doing of ſtrange and incredible Penances.

They ſay, that God is ſuch a one, that whoſoever ſeeks him, let it be after what manner he pleaſes, whether by thinking that the Sun is he, or the Moon, or the like, if they do it but ſincerely and honeſtly, with a right affected Heart, they ſhall be received of him.

They report, that on a Time a *Muſſulman* ſeeing a *Hindoo*, or Pagan Prieſt, in Heaven, he aſked God how that Infidel came to have Admittance thither, whom *Mahomet* ſo often calls

calls by the Name of Bitter Roots? To whom God anſwered, what if a bitter Root bring forth ſweeter Fruit than any of you, why ſhould I not receive it? Upon which the *Muſſulman* had no more to ſay.

They hold, that ſuch as ſuffer not their Minds to wander after the Luſts of the World are perfect *Jogees*, or Saints, and hold that God is always preſent with them in all their Actions.

It is to be found in many of their Books, that there was a Time, a good while ago, in which God took upon him the Shape of a Man, and ſpent many Years in reforming the World, and giving better Rules to walk by than had been before: But at length having left them, they ſoon forgot him and his Rules, and returned to their former Courſes; upon which he told them that he would leave them to their Ways, and never undertake any ſuch thing again.

The Religious at ſome certain Seaſons of the Year come unto the River *Ganges* (which they call the holy River) in vaſt Multitudes, even from many Parts of *Tartary*, to waſh away their Sins, and make Expiation for their Faults.

This *Ganges* is a delicate fine River chiefly for the Sake of its moſt ſweet, pure and clear Waters, which have got it the greateſt Eſteem of any River in the Eaſt. I have oftentimes ſail'd many Miles up it, and have found it in ſome Places not to be above a Mile broad, in others not half ſo much, and in one or two places not above one eighth of a Mile. In *April*, when the Water is at the loweſt, it is almoſt dry in many Places; but when it is at

the higheſt, which is commonly about the Middle of *September*, it is very deep, and many Miles broad.

When the People are here gather'd together, they have a great many ſtrange Cuſtoms and Ceremonies, and pay a kind of divine Honour and Worſhip to the River, too long and tedious here to mention. The *Hindoos* and *Bramines* preach then every Day to the People, teaching them their Duties, and ordering them to ſay ſuch and ſuch Prayers; but above all things to be charitable to the Poor and Needy.

It is reported, that upon the Hills by *Caſmere* there are Men that live ſome hundreds of Years, and can hold their Breaths, and lie in Trances for ſeveral Years together, if they be but kept warm; and that every Year ſome of them come down unto the People at *Ganges*, and do many great Cures; for whom they have ſuch a Veneration, that they frequently drink the Water they waſh their ſweaty Feet in.

The Penances and Auſterities that they undergo are almoſt incredible; moſt of them, through their continual Faſtings, and lying upon the parching hot Sand in the Heat of the Sun, are ſo lean, dry'd and wither'd, that they look like Skeletons or Shadows, and one can ſcarce perceive them to breath, or feel their Pulſe beat.

When any great Man dies among them, but eſpecially any of their *Jogees* or Saints, they make great Preparations for their Funeral; the Corpſe is laid on its Belly, and Salt and Rice laid round about it at every corner of the

the Ground. Then the neareſt Relations to the Party deceaſed carry a Pot of Water on their Shoulders ſeveral times about the funeral Pile, when they burn them, then breaking it in Pieces, ſpill the Water. Which Ceremony being ended, the Pile is fired, and then all the Relations begin to howl, and embrace one another, then waſhing themſelves in ſome neighbouring River, they depart every one to his Home; and as for the remaining Aſhes, if he be Rich they gather them up, and caſt them into the *Ganges* or the Sea.

Sometimes it happens that the Wife of the deceaſed Party, if ſhe have no Children, and be old, or ill to live in the World, will burn her ſelf with the dead Body; but this happens very ſeldom. It is ſaid, that in ſuch Caſes the *Bramines* give the Woman a ſtupifying Liquor, which by the Time that they are in the Fire makes them ſenſeleſs of any Pain.

To know into what Body the Soul of the deceaſed is tranſmigrated they do thus; they ſtrew the Aſhes of the Dead upon the Place where he was firſt laid after his Death, and handfuls of odoriferous Flowers about the ſame, and returning again in 44 Hours, they judge by ſome pretended Impreſſion or other in the Aſhes, into what Body it is gone: If the Foot of an Horſe, or Dog, or Ox, or ſuch like appear, then they certainly give out that it is gone into ſuch like Creatures; but if nothing appear, then they think it is certainly gone to the ſtarry Regions.

As for their Learning and Knowledge it is but little; they have indeed ſeveral Books writ in divers Languages, but they contain nothing but a great deal of Stuff and Cant about their Worſhip, Rites and Ceremonies.

They are ignorant of all Parts of the World but their own; they wonder much at us, that will take ſo much Care and Pains, and run thro' ſo many Dangers both by Sea and Land; only, as they ſay, to uphold and nouriſh Pride and Luxury. For, ſay they, every Country in the whole World is ſufficiently endow'd by Nature with every thing that is neceſſary for the Life of Man, and that therefore it is Madneſs to ſeek for, or deſire, that which is needleſs and unneceſſary.

The laſt Time that I was at *Modufferpore* in *Indoſtan*, I had a great deal of Talk with a *Bramine* ſomewhat more learned than any of the reſt, his Name was *Ramnaunt*; he told me a great many Secrets in Phyſick, and told me many Traditions and Stories. He ſays, that if you bury a Piece of Money for ſome conſiderable Time in the Mouth of a live Frog, and then dig it up again at Midnight, that this Piece of Money, to whomſoever you give or pay it, will always return to you again.

He ſays, that if the little Worm in the Wood *Lukerakera* be cut in two, and the one Part ſtirs and the other not, if the ſtirring Part be bruiſed, and given with half a Beetle to a Man, the other half to a Woman, this Charm will keep them from ever lying abſent one from the other.

They have Books full of the like Abſurdities, and cabaliſtic Complications of Figures; as for Example, if you write theſe following Numbers, 28, 35, 2, 7.——6, 3, 32, 31—34, 29, 8, 1,—4, 5, 30, 33. in the Squares of a ſquare Figure, and your Enemy's Name under it, and wear it always about you, your Enemy ſhall never be able to hurt you.

So if you write the following Figures in the like Manner upon the left Hand, 2, 9, 2, 7—6, 3, 6, 5,—8, 3, 8, 1—4, 5, 4, 7— with Turmerick, and waſh the ſame off with fair Water of *Ganges*, and drink it, it will cure all Manner of venomous Bitings.

Multitudes of ſuch like ridiculous Fancies they have; all which they ſeem to have borrowed from the *Cabala* of the *Saracens*, which is full of ſuch like.

I lately heard a *Bramine* ſay, that if ſome of the Pieces or Knots of the Cloth (in which a Woman hath been burned with her Husband) be ſaved, and made up in the Form of a Wick, and fitted for a Lamp, and lighted, and ſet in a dead Woman's Skull, that it would make the dead Party appear. This he ſaid he had done, but I did not believe him.

When they have any Madmen among them, they take them and put them into a cloſe Room, juſt big enough to hold them, and almoſt ſmoke them to Death with Muſk and cold Smells, which ſoon brings their Brains into their right Temperature, and ſo recover them, *&c.*

There happen'd two things in our Voyage hither which I thought very obſervable tho' perhaps they may not be unknown to you—

The

The firſt was, that all our Tornadoes brought much Rain with a Stink; and if the Sea-men did but lay their Clothes by for twenty four Hours, they became all full of little Maggots. The ſecond is, when we came out of *Europe* we took in ſome Water at St. *Jago*'s, and when we were almoſt at our Journey's End, our Cooper going with a Candle to open one of the Caſks, he had no ſooner done it, but the Water immediately took Fire, and burnt his Face, Hands and Fingers; but he ſuddenly turning about quench'd the ſame, by ſetting his Breech on it. It ſtunk pretty much alſo at the ſame Time, but afterwards came to its native Sweetneſs, *&c.*

I am yours, &c.

Jo. Marſhal.

Part of two Letters to the Publiſher from Mr. James Cunningham, *F. R. S. and Phyſician to the* Engliſh *at* Chuſan *in* China, *giving an account of his Voyage thither, of the Iſland of* Chuſan, *of the ſeveral Sorts of Tea, of the Fiſhing, Agriculture of the* Chineſe, &c. *with ſeveral Obſervations not hitherto taken Notice of.*

SIR,

MY laſt to you was from the Iſland of *Borneo*, in which I gave you an account of our Arrival there the ſeventeenth of *July*, where we ſtaid but two Days, the Seaſon of the Year being ſo far paſt, and from thence made the beſt of our Way through the Streights of *Banca* with favourable Winds and Weather, till we came on the Coaſt of *China* the thirteenth of *Auguſt*; then we had variable Winds which carried us abreaſt of *Emuy* the nineteenth following, at which Time the North Eaſt Winds ſetting in freſh, put us in great Fears of loſing our Paſſage; whereupon we were

forced to turn it up againſt Wind and Current all the Way, the Weather ſo favouring us, that we were never but by our Topſails, elſe we ſhould have loſt more Ground in one Day, than we could have gain'd in eight. The laſt of *Auguſt* we came to an Anchor under the *Crocodile* Iſlands, both to ſhelter us from the bad Weather, (which is generally expected on this Coaſt at new and full Moon, and has been fatal to a great many Ships) and alſo to look for freſh Water, which was now grown ſcarce with us, not having recruited ſince we came from the Cape of *Good Hope*: Theſe are three ſmall Iſlands lying in the Latitude of 26 Degrees, about ſix Leagues from the River of *Hockſieu*; on *two* whereof we found very good freſh Water, with a convenient Watering-place on the South Weſt Side of the innermoſt of the *three*; and by the Aſſiſtance of a few *Chineſe* Fiſher-men we procured ſome freſh Proviſions from the main-land, becauſe we did not reckon it ſafe to adventure our ſelves thither, leſt we ſhould have been brought into Trouble by the Government there. While we lay here, on the fifth of *September* we had a ſuddain ſhort Shift of the Monſoon to S. W. the Fury whereof others felt, in coming upon the Coaſt of *China* at the ſame Time. The eighth of *September* we put to Sea again, turning to Windward Night and Day without all the Iſlands, which are very numerous along this Coaſt, to which we were altogether Strangers beyond *Emuy*, and the Hydrography thereof is hitherto ſo imperfect, that there was no truſting to our Draughts, which made our Navigation ſomewhat more dangerous;

dangerous: However, on the firſt of *October* we got into the Latitude of 30 Degrees, where we came to an Anchor near the Land, until we found the Way by Boat to *Chuſan*, about 12 Leagues within the Iſlands; from whence we had a Pilot, who carried us ſafely thither on the eleventh of *October*. Upon this Iſland the *Chineſes* have granted us a Settlement and Liberty of Trade, but not to *Ning-po*, which is ſix or eight Hours ſail to the Weſtward, all the Way among Iſlands; this being the largeſt is eight or nine Leagues in length from Eaſt to Weſt, and four or five Leagues in breadth; about three Leagues from that point of the Main-Land called Cape *Liampo* by the *Portugueze*, but *Khi-tu* by the *Chineſe*: At the Weſt End of this Iſland is the Harbour very ſafe and convenient, where the Ships ride within call of the Factory, which is built cloſe by the Shore on a low plain Valley, with near two hundred Houſes about it for the Benefit of Trade; inhabited by Men, whoſe Jealouſy has not as yet permitted them to let their Wives dwell here; for the Town where they are, is ¾ of a Mile further from the Shore, environ'd with a fine Stone-wall, about three Miles in Circumference, mounted with twenty two ſquare Baſtions placed at irregular Diſtances, beſides four great Gates, on which are planted a few old Iron Guns, ſeldom or never uſed: The Houſes within are very meanly built: Here the *Chumpeen*, or Governor of the Iſland lives, and betwixt three and four thouſand beggarly Inhabitants, moſt part Soldiers and Fiſhermen; for the Trade of this Place being newly granted, has not as yet brought any conſiderble Mer-

Merchants hither. The Island in general abounds with all Sorts of Provisions, such as Cows, Buffalo's, Goats, Deer, Hogs wild and tame, Geese, Ducks and Hens; Rice, Wheat, Calavances, Coleworts, Turnips, Potatoes, Carrots, Beets and Spinage; but for Merchandize there's none but what comes from *Ning-po*, *Hancheu*, *Nankin* and the inland Towns, some of which I hope to see, when I have acquir'd a little of the *Chinese* Language. Here also the Tea grows in great plenty on the Tops of the Hills, but it is not in that Esteem with what grows on more mountainous Islands. Altho' this Island is pretty well stor'd with People, yet it's far from what it was in *F. Martinius*'s Time, when he describes *Cheuxan:* And this puts me in mind that the superstitious Pilgrimages thereto, mention'd by him, must be meant of the Island *Pou-to*, which lies nine Leagues from hence, and three Miles to the Eastward of this Island, whither (they say) the Emperor designs in the Month of *May* next (being his Birth-Day, and the fortieth Year of his Age) to come to worship in an ancient Pagod there, famous for Sanctity; having sent one of his *Bonzes* already thither to get all things in order.

Chusan,

Chuſan, Novemb. 22. 1701.

SIR,

I Formerly told you, that the Emperor deſign'd to have come to the Iſland of *Pouto* (a Place of great Devotion) to worſhip in the Month of *May* laſt, being the fortieth Year of his Age, I ſhould have ſaid of his Reign; but all things being prepared there for his Reception, he was diſſuaded from his Purpoſe by ſome of his *Mandarines*, who made him believe that the terrible Thunder there was very dangerous. This *Pou-to* is a ſmall Iſland about five Leagues round at the Eaſt End of this Iſland, famous for the ſuperſtitious Pilgrimages made thither for the ſpace of eleven hundred Years: It's inhabited only by *Bonzes*, to the Number of 3000, all of the Sect call'd *Hoſhang*, or unmarried *Bonzes*, who live a *Pythagorean* Life; and there they have built 400 Pagodes, two whereof are conſiderable for their Greatneſs and Finery, being lately covered with green and yellow Tiles brought from the Emperor's Palace at *Nankin*; and inwardly adorn'd with ſtately Idols finely grav'd and gilded, the chief whereof is the Idol *Quon-em*. To theſe two great Pagodes belong two chief Prieſts, who govern all the reſt. They have ſeveral Ways and Avenues cut through the Iſland, ſome whereof are pav'd with Flag-ſtones, and over-ſhaded with Trees planted on each Side: Their dwellings are the beſt I have yet ſeen in theſe Parts.

All which are maintain'd by charitable Devotions; and the Junks which go from *Ning-po* and this Place to *Japan*, touch there both going and coming, to make their Offerings for their good Succeſs. There is another Iſland call'd *Kim-tong* five Leagues hence in the Way to *Ning-po*, whither they ſay, do retire a great many *Mandarines* to live a quiet Life after they have given over their Employments; on that Iſland alſo are ſaid to be Silver Mines, but prohibited to be open'd. The reſt of the circumjacent Iſlands are either deſert, or meanly inhabited by a few fiſhing People, but all of them ſtor'd with Abundance of Deer. For it is not long ſince this Iſland of *Chuſan* began to be Peopled; it's true, in *Martini*'s Days, about fifty Years ago, it was very Populous for the Space of three or four Years, at which Time the Fury of the *Tartarian* Conqueſt was ſo great, that they left it deſolate, not ſparing ſo much as the Mulberry Trees (for then they made a great deal of raw Silk here) and in this Condition it continuded till about eighteen Years ago, that the Walls of the Fort or Town, which now is, were built by the Governor of *Ting-hai*, for a Gariſon to expel ſome Pirates, who had taken Shelter here. About fourteen Years ago, the Iſland beginning to be peopled, there was a *Chumpeen* or General ſent to govern it for three Years, to whom ſucceeded the late *Chumpeen* (who procur'd the opening of this Port to Strangers) whoſe Government continued till *April* laſt, being tranſlated to be *Chumpeen* of *Tien-cing Wei* near to *Pekin*, and was ſucceeded by the preſent *Chumpeen*, who is Son to the old *Chunkoon* of *Emuy*.

They

They have got no Arts or Manufactories here, but making of lacker'd Ware, a particular Account whereof I cannot as yet ſend you. They begin to plant Mulberry-Trees, to breed up Worms for the Production of raw Silk; and they make ſome Tea, but chiefly for their own Uſe.

Altho' the following Particulars contain nothing of extraordinary Matters in them, yet ſuch as they are, you may take, till I can procure you better.

The three Sorts of Tea commonly carry'd to *England* are all from the ſame Plant, only the Seaſon of the Year, and the Soil, makes the Difference. The *Bohee* (or *Voiii*, ſo call'd of ſome Mountains in the Province of *Fokien*, where it is chiefly made) is the very firſt Bud gathered in the Beginning of *March*, and dried in the Shade. The *Bing* Tea is the ſecond growth in *April:* And *Singlo* the laſt in *May* and *June*, both dry'd a little in *Tatches*, or Pans over the Fire. The Tea Shrub being an ever-green, is in Flower from *October* to *January*, and the Seed is ripe in *September* and *October* following, ſo that one may gather both Flowers and Seed at the ſame Time; but for one freſh and full Seed, there are a Hundred nought; theſe make up the two Sorts of *Fruit* in *Le Compte*'s Deſcription of Tea: as for his other Sort, which he call ſlymic Peaſe, they were nothing but the young Buds of the Flowers not yet open. It's Seed-Veſſels are really *Tricapſular*, each *Capſula* containing one Nut or Seed, and altho' two or one *Capſula* only comes to Perfection, yet the Veſtiges of the reſt may be diſcerned. It

grows in a dry gravelly Soil, on the Sides of Hills in ſeveral Places of this Iſland, without any Cultivation.

Le Compte is miſtaken in ſaying (*pag.* 96.) that the *Chineſes* are wholly Strangers to the Art of Grafting, for I have ſeen a great many of his Paradoxical Tallow-Trees ingrafted here, beſides ſome other Trees. When they ingraft, they do not ſlit the Stock as we do, but cut a ſmall Slice off the outſide of the Stock, to which they apply the Graft (being cut ſloping on one Side, agreeable to the Slice cut from the Stock) bringing up the Bark of the Slice upon the outſide of the Graft, they tie altogether, covering with Straw and Mud as we do.

The Commentator on *Magalhen* ſeems doubtful in the Length of the *Chineſe Che* or Cubit. Here they have two Sorts, one of 13 $\frac{3}{10}$ *Engliſh* Inches, which the Merchants commonly uſe: The other is of eleven Inches, us'd by Carpenters, and alſo in Geographical Meaſures.

Albeit *F. Martini* is cenſur'd by *F. Magalhen* for ſpelling a great many *Chineſe* Words with *ng*, which the *Portugueſe* and others have done with *m*, yet his Way is more agreeable to the *Engliſh* Pronunciation, only in ſome Words the *g* may be left out, as in *Pekin*, *Nankin*, &c.

Having made Enquiry about *Martini*'s Account of Sowing their Fields at *Ven-cheu* with Oyſter-ſhells, to make new ones grow; I was told that after they have taken out the Oyſters, they ſprinkle the Shells with Urine, then putting them into the Water again, there grows new Oyſters on the foreſaid Shells.

Martini

Martini ſays, he could never find a *Latin* Name for the *Fula Mogorin* of the *Portugueſe*, I'm ſure it's the ſame with the *Syringa Arabica flore pleno albo in Parkinſon.* He ſays alſo that the *Kieu-yeu*, or Tallow-tree bears a white Flower like a Cherry-tree; but all that I have ſeen here bears a Spike of ſmall yellow Flowers like the *Julus* of a *Salix.*

The Bean, or *Mandarin* Broth, ſo frequently mentioned in the *Dutch* Embaſſy and other Authors, is only an Emulſion made of the Seed of *Seſamum* and hot Water.

Their chief Employments here are Fiſhing and Agriculture.

In Fiſhing, they uſe ſeveral Sorts of Nets and Lines as we do; but becauſe they have large Banks of Mud in ſome Places, the Fiſherman, to go more eaſily thereon, has contriv'd a ſmall Frame about three or four Foot long, not much larger than a Hen-trough, elevated a little at each End, in which he reſts upon one Knee, leaning his Arms on a croſs Stick, rais'd ſo high as his Breaſt, and putting out the other Foot often upon the Mud, he puſhes forward his Frame thereon, and ſo carries himſelf along in it.

As to their Agriculture, all their Fields (where any thing is planted) whether high or low, are made into ſuch Plots as may retain the Water on them when they pleaſe. They plow up their Ground with one Buffelo or one Cow. Where they are to ſow Rice, they prepare the Fields very well, by clearing it of all manner of Weeds, moiſtening to a Pulp, and ſmoothing it with a Frame drawn acroſs; on which they ſow the Rice very thick and co-

ver it only with Water for two or three Inches high; and when it has grown ſix or eight Inches long, they pull it up by the Roots, and tranſplant it (by Tufts in a ſtraight Line) to Fields overflown with Water; and where a Field is ſubject to Weeds, when the Water drys up, they prevent their growth in overturning the Mud with their Hands in the Interſtices where the Rice is planted. When they ſow Wheat, Barley, Pulſe, and other Grains, they grub up ſome ſuperficial Earth, Graſs and Roots, and with ſome Straw they burn all together; this Earth being ſifted fine, they mix with the Seed, which they ſow in holes made in a ſtraight Line, and ſo grows up in Tufts as the Rice does; the Field being divided into Beds and harrowed over both before and after the Seed is ſown: This makes them ſomewhat reſemble Gardens. Although they meliorate their Fields, where they ſow Rice, only by letting the Water on them, yet for other Grains, where Ground requires it, they make uſe of Dung, human Excrements, Aſhes, *&c.* In watering their Field here they uſe the ſame Inſtrument mention'd by *Martini* in the Preface to his Atlas, being all of Wood, and the Contrivance the ſame with that of a Chain-pump.

Their Method in making of Salt is this: All the Shores here being Mud, inſtead of Sand, in the Summer Seaſon they pare off the ſuperficial Earth, which has been over-flown with the ſalt Water, and lay it up in Heaps for uſe; when they are to uſe it, they dry it in the Sun, rubbing it ſmall; then digging a Pit, they cover the Bottom thereof with Straw, at which

which thro' the Side of the Pit they paſs a hollow Cane, that leads into a Jar, which ſtands below the Level of the Pit's Bottom; they fill the Pit almoſt full with the foreſaid Earth, and pour ſalt Water thereon, till it be covered two or three Inches with Water, which drains through, into the foreſaid Jar, and is afterwards boil'd into Salt.

Had I not found the printed News Papers laſt Year take notice of a ſingular Root brought from *China* by *F. Fontaney*, I ſhould not have told you, that I have ſeen one ſince I came here call'd *Hu-cu-u* (which I take to be the ſame) whereto they aſcribe wonderful Properties of prolonging Life, and turning grey Hairs into black, by drinking its Infuſion for ſome time, inſomuch that they ſay it's to be had in value from 10 *Tael* to 1000 or 2000 a ſingle Root; for the larger it is, the more is its value and efficacy: Which is too much Money here to try the Experiment. You have it mention'd in *Cleyer*'s *Medicina Sinica* No. 84. under the Name of *Ho-xeu-u*, according to the *Portugal* Spelling: It's likewiſe painted in the 27th Table of thoſe Plants Mr. *Petiver* had of me. If you'll have the Story of its Diſcovery, which I will not warrant for Goſpel, it runs thus. Upon a Time a certain Perſon going a Simpling among the Mountains, fell by accident into ſuch a ſteep Valley that he could by no means get out of it again; whereupon looking about for ſomething to ſuſtain his Life; in this melancholy Condition, he eſpy'd this Root, of which he made Tryal; and found that in eating thereof, it ſerv'd him both for Proviſions and

Cloathing, by keeping his Body in ſuch a Temperature, that the Injuries of the Weather had no Influence upon him during his Stay there, which was ſome hundreds of Years; till at laſt an Earthquake happen'd in that Place, whereby the Mountains were rent, and he found a Paſſage out to his Houſe, from whence he had been ſo long abſent: But the many Alterations that came to paſs there in ſuch a Space of Time, would not permit them to give Credit to his Story; till conſulting the Annals of their Family, which gave an Account of one of them loſt at that Time, they were confirm'd in the Truth of his Relation. And ſo much for this.

A Letter from Mr. John Clayton *Rector of* Crofton *at* Wakefield *in* Yorkſhire, *to the Royal Society*, May 12. 1688. *giving an Account of ſeveral Obſervables in* Virginia, *and in his Voyage thither, more particularly concerning the Air.*

HAving oftentimes been urged to give an Account of *Virginia*, by ſeveral of the Worthy Members of the Royal Society, I cannot but, as far forth as I am able, obey Commands whereby I'm ſo much honour'd, and ſhew my Reſpect by my ready Compliance; tho' I am ſo ſenſible of my own Weakneſs and Incapacity to anſwer your Expectations, that before-hand I muſt Apologize for my ſelf. And indeed by Sea I loſt all my Books, Chymical Inſtruments, Glaſſes and Microſcopes, which rendred me uncapable of making thoſe Remarks and Obſervations I had deſigned, they were all caſt away in Captain *Win*'s Ship, as they were to follow me; and *Virginia* being a Country where one cannot furniſh ones ſelf again with ſuch things, I was diſcourag'd from making ſo diligent a Scrutiny as otherwiſe I might have done, ſo that

that I took very few Minutes down in Writing; and therefore, ſince I have only my Memory to rely on, which too has the Diſadvantage of it's own Weakneſs, and of the Diſtance of two Years ſince now I left the Country, if future Relations ſhall in ſome ſmall Points, make out my Miſtake, I thought this requiſite to juſtify my Candor; for I ever judg'd it villanous to impoſe in matters of Fact; but Deſcriptions of things that depend on Memory may be liable to Miſtakes; and yet the Sincerity of the Perſon that delivers them intire. But hereof I ſhall be as cautious as poſſible, and ſhall rather wave ſome things whereof I have ſome Doubts, and am uncapable now of ſatisfying my ſelf, than in any ſort preſume too far. The Method I deſign is, firſt, to give an Account of the Air, and all ſuch Obſervations as refer thereto; then of the Water, the Earth and Soil; the Birds, the Beaſts, the Fiſhes, the Plants, the Inſects; and laſtly, the preſent State of the Inhabitants: But at preſent I ſhall neither trouble you nor my ſelf with any more than an Account of what refers to the Air alone, being conſcious the honourable Society may receive ſuch a Glut with the Imperfection of this, as to excuſe me from a farther Relation.

But before I begin, perhaps it may not be impertinent to acquaint you with ſome things that happen'd in our Voyage. We ſail'd in the Ship *Judith*, Captain *Trim* Commander, 'twas Fly-boat built, about 200 or 250 Tuns; ſhe ſprung a conſiderable Leak. When the Captain had made long and diligent Search,

had

had tried all Methods that Sea-men uſe upon ſuch Occaſions, or he could think of, all in vain, and that the Leak encreaſed, he came penſively to conſult me. Diſcourſing with him about it, and underſtanding that the Ship was cieled within; ſo that though the Leak might poſſibly be in the Fore-part, it would fill the whole Cavity betwixt the Cieling and the Planks, and ſo run into the Hold at all the Crevices of the Cieling up and down: I thereupon conceived, that where it burſt in betwixt the Cieling and the Planks, it muſt needs make ſome Noiſe. He told me, they had endeavoured to find it out that Way, and according to cuſtom had clapt Cans to their Ears to hear with; but the working of the Ship, the Tackle and the Sea made ſuch a Noiſe, that they could diſcover nothing thereby. I happily bethought my ſelf of the Speaking Trumpet; and having one which I had contrived for ſome other Conveniences, of a differing Shape from the common Sorts, I bid him take it and apply the broad End to the Side of the Ship, the narrow End to his Ear, and it would encreaſe his Hearing as much as it augmented the Voice the other Way, and would ward the Ear the too from the Confuſion of foreign Noiſe. Upon the firſt Application, accordingly they heard it, tho' it happened to be at a conſiderable Diſtance; and when they removed the Trumpet nigher, they heard it as if it had been the Current of a mighty River, even ſo diſtinctly, as to have Apprehenſions of the bigneſs and figure of the Hole that the Water came in at; ſo that cutting there the Cieling of the Ship, they immediately ſtopt the Leak.

In

In the Sea I ſaw many little things which the Seamen call Carvels; they are like a Jelly, or Starch that is made with a caſt of Blue in it; they Swim like a ſmall Sheeps Bladder above the Water, downwards there are long fibrous Strings, ſome whereof I have found near half a Yard long. This I take to be a Sort of Sea-Plant, and the Strings its Roots growing in the Sea, as Duck-weed does in Ponds. It may be reckon'd among the Potential Cauteries; for when we were one Day becalm'd, getting ſome to make Obſervations thereof, the ſportful People rub'd it on one anothers Hands and Faces, and where it touch'd it would make it look very Red, and make it ſmart worſe than a Nettle. In my Return for *England* we ſtruck a Hauksbill Turtle, in whoſe Guts I found many of theſe Carvels; ſo that it's manifeſt they feed thereon. 'Tis commonly aſſerted by the Seamen, that they can ſmell the Pines at *Virginia* ſeveral Leagues at Sea before they ſee Land, but I could receive no Satisfaction as to this Point; I could not diſcern any ſuch thing when at a moderate Diſtance, I fear much of this may be attributed to Fancy; for one Day there came three or four full Scent to tell me they were certain they ſmelt the Pines; but it afterwards prov'd that we were at that Time two hundred Leagues from the Shoar, ſo that I was ſatisfied that was therefore meer Fancy. Indeed we thought, by the general Accounts of the Ship, that we had been juſt on the Coaſt, but all were deceived by a Current we met with, that at that Time ſet about South-Eaſt, or Eaſt South-

South-Eaſt, which when once becalmed we tried thus: We hoiſed out a Boat, and took one of the Scuttles that covered one of the Hatches of the Ship, tying thereto a great Weight, and a ſtrong long Rope, we let it ſink a conſiderable Depth, and then faſtning it to the Boat, it ſerv'd as an Anchor, that the Boat could not drive; then with the Glaſs and log Line we found the Current ſet, as I ſay, Eaſtward, at the rate of a Mile and a half an Hour. This Current is of miſchievous Conſequence, it does not always run one way, but as it ſets ſometimes as we proved Eaſterly, ſo does it as they ſay, ſet at other Times Weſterly, whereby many Ships have been loſt; for then the Ships being before their Accounts, they fall in with the Land before they are aware. Thus one Year many Ships were loſt on Cape *Hattaraſſe*, and thereabouts.

Of the AIR.

THE Cape called *Cape Henry*, lies in 36½ of the Northern Latitude. The Air and Temperature of the Seaſons is much govern'd by Winds in *Virginia*, both as to heat and cold, drineſs and moiſture, whoſe Variations being very notable, I the more lamented the Loſs of my Barometers and Thermometers, for conſiderable Obſervations might be made thereby, there being often great and ſuddain Changes. The Nore and Nore-Weſt are very nitrous and piercing, cold and clear,

or

or elſe ſtormy. The South-Eaſt and South hazy and ſultry hot: Their Winter is a fine clear Air, and dry, which renders it very pleaſant: Their Froſts are ſhort, but ſometimes very ſharp, that it will freeze the Rivers over three Miles broad; nay, the Secretary of State aſſured me, it had frozen clever over *Potomack* River, over againſt his Houſe, where it is near nine Miles over: I have obſerved it freezes there the hardeſt, when from a moiſt South Eaſt, on a ſudden the Wind paſſing by the Nore, a nitrous ſharp Nore-Weſt blows; not with high Guſts, but with a cutting briſk Air; and thoſe Vales then that ſeem to be ſhelter'd from the Wind, and lie warm, where the Air is moſt ſtagnant and moiſt, are frozen the hardeſt, and ſeized the ſooneſt; and there the Fruits are more ſubject to blaſt than where the Air has a free Motion. Snow falls ſometimes in pretty Quantity, but rarely continues there above a Day or two: Their Spring is about a Month earlier than in *England*; in *April* they have frequent Rain, ſometimes ſeveral ſhort and ſuddain Guſts. *May* and *June* the Heat encreaſes, and it is much like our Summer, being mitigated with gentle Breezes that riſe about nine of the Clock, and decreaſe and incline as the Sun riſes and and falls. *July* and *Auguſt* thoſe Breezes ceaſe, and the Air becomes ſtagnant, that the Heat is violent and troubleſome. In *September* the Weather uſually breaks ſuddenly, and there falls generally very conſiderable Rains. When the Weather breaks many fall Sick, this being the Time of an endemical Sickneſs, for Seaſonings, Cachexes, Flux-

es, Scorbutical Dropſies, Gripes, or the like which I have attributed to this Reaſon. That by the extraordinary Heat, the Ferment of the Blood being raiſed too high, and the Tone of the Stomach relaxed, when the Weather breaks the Blood palls, and like over-fermented Liquors is depauperated, or turns eager and ſharp, and there's a crude Digeſtion, whence the named Diſtempers may be ſuppoſed to enſue. And for Confirmation, I have obſerved the carminative Seeds, ſuch as warm, and whoſe Oil ſheaths the acid Humors that ever reſult from crude Digeſtions. But Decoctions that retain the Tone of the Stomach, as I ſuppoſe, by making the little Glands in the Tunicles of Stomach, ſqueeze out their Juice, (for what is bitter may be as well offenſive to the Stomach, as to the Palate) and then Chalibiates that raiſe the decayed Ferment, are no bad Practice; after which, I conceive, Armoniack Spirits might be very beneficial. But their Doctors are ſo learned, that I never met with any of them that underſtood what Armoniack Spirits were: Two or three of them one Time ran me clear down by Conſent, that they were Vomitive, and that they never uſed any thing for that Purpoſe but Crocus Metallorum, which indeed every Houſe keeps; and if their Finger, as the Saying is, ake but, they immediately give three or four Spoonfuls thereof; if this fail, they give him a ſecond Doſe, then perhaps Purge them with fifteen or twenty Grains of the Roſin of Jalap, afterwards Sweat them with *Venice* Treacle, Powder of Snake-root, or *Gaſcoin*'s Powder;

and

and when theſe fail *conclamatum eſt*. But to return. 'Tis wonderful what influence the Air has over Men's Bodies, whereof I had my ſelf ſad Aſſurances; for tho' I was in a very cloſe warm Room, where was a Fire conſtantly kept, yet there was not the leaſt Alteration or Change, whereof I was not ſenſible when I was ſick of the Gripes, of which Diſtemper I may give a farther Account in it's proper Place. When a very ingenious Gentlewoman was viſited with the ſame Diſtemper, I had the Opportunity of making very conſiderable Obſervations. I ſtood at the Window, and could view the Clouds ariſe: for there ſmall black fleeting Clouds will ariſe, and be ſwiftly carry'd croſs the whole Element; and as theſe Clouds aroſe, and came nigher, her Torments were encreaſed, which were grievous as a labouring Womans; there was not the leaſt Cloud but lamentably affected her, and that at a conſiderable Diſtance; but by her Shrieks it ſeemed more or leſs, according to the Bigneſs and nearneſs of the Clouds. The Thunder there is attended often with fatal Circumſtances: I was with my Lord *Howard* of *Effingham* the Governor, when they brought Word that one Dr. *A.* was killed therewith after this Manner. He was Smoaking a Pipe of Tobacco, and looking out at his Window when he was ſtruck dead, and immediately became ſo ſtiff, that he did not fall, but ſtood leaning in the Window, with the Pipe in his Mouth, in the ſame Poſture he was in when ſtruck: But this I only deliver as Report, tho' I heard the ſame Account from ſeveral, without any contradicting it. Theſe

things are remarkable, that it generally breaks in at the Gavel End of the Houſes, and often kills Perſons in, or near the Chimney's Range, darting moſt fiercely down the Funnel of the Chimney; more eſpecially if there be a Fire, (I ſpeak here confuſedly of Thunder and Lightning) for when they do any Miſchief, the Craſh and Lightning are at the ſame Inſtant, which muſt be from the nearneſs of the Cloud. One Time when the Thunder ſplit the Maſt of a Boat at *James* Town, I ſaw it break from the Cloud, which it divided in two, and ſeemed as if it had ſhot them immediately a Mile aſunder, to the Eye: It is dangerous when it thunders ſtanding in a narrow Paſſage, where there's a thorough Paſſage, or in a Room betwixt two Windows; tho' ſeveral have been kill'd in the open Fields. 'Tis incredible to tell how it will ſtrike large Oaks, ſhatter and ſhiver them, ſometimes twiſting round a Tree, ſometimes as if it ſtruck the Tree backwards and forwards. I had noted a fine ſpreading Oak in *James Town* Iſland, in the Morning I ſaw it fair and flouriſhing, in the Evening I obſerved all the Bark of the Body of the Tree, as if it had been artificially peeled off, was orderly ſpread round the Tree, in a Ring, whoſe Semidiameter was four Yards, the Tree in the Center; all the Body of the Tree was ſhaken and ſplit, but its Boughs had all their Bark on; few Leaves were fallen, and thoſe on the Boughs as freſh as in the Morning, but gradually afterwards withered, as on a Tree that is fallen. I have ſeen ſeveral vaſt Oaks and other Timber Trees twiſt-

ed, as if it had been a ſmall Willow that a Man had twiſted with his Hand, which I could ſuppoſe had been done by nothing but the Thunder. I have been told by very ſerious Planters, that thirty or forty Years ſince, when the Country was not ſo open, the Thunder was more fierce, and that ſometimes after violent Thunder and Rain, the Roads would ſeem to have perfect caſts of Brimſtone; and 'tis frequent after much Thunder and Lightning for the Air to have a perfect ſulphureous Smell. Durſt I offer my weak Reaſons when I write to ſo great Maſters thereof, I ſhould here conſider the Nature of Thunder, and compare it with ſome ſulphureous Spirits which I have drawn from Coals, that I could no way condenſe, yet were inflamable; nay, would burn after they paſs'd through Water, and that ſeemingly fiercer, if they were not over-power'd therewith. I have kept of this Spirit a conſiderable time in Bladders; and though it appeared as if they were only blown with Air, yet if I let it forth, and fired it with a Match or Candle, it would continue burning till all were ſpent. It might be worthy Conſideration likewiſe, whether thoſe frequent Thunders proceeded from the Air's being more ſtagnant, the Motion of the Winds being impeded by the Trees, or whether the Motion of the Winds being obſtructed by them below, the Motion might not be more violent aloft; and how far that may promote Inflammability; for Stacks of Hay or Corn that ferment with Moiſture, never burn, unleſs when briſk Winds blow, that agitate and fan the little

little fermenting Sparks, and often kindle them into an actual Fire. And Obſervance of the Meteors there might perhaps not be impertinent, as both what are more rare, and what are more frequent, as of *Goſimore* in great Abundance, and of thoſe ſmall Cob-webs in a Morning, which ſome have ſuppoſed to be Meteors. *Ignes fatui*, though there be many boggy Swamps and Marſhes, are ſeldom, if any are ſeen there. There be frequent little ſorts of Whirl-winds, whoſe Diameter may be ſometimes not paſt two or three Yards, ſometimes forty, which whiſking round in a Circle, paſs along the Earth, according to the Motion of the Cloud, from whence they iſſue; and as they paſs along with their gyrous or circular Motion, they carry aloft the dry Leaves into the Air, which fall again often in places far remote. I have ſeen them deſcend in a calm Sun-ſhine Day, as if they had come from the Heavens in great Showers thereof, ſo that all the Elements ſeemed filled therewith. And I could perceive them to deſcend from on high as far as I could poſſibly diſcern a Leaf. I remember a roguiſh Expreſſion of a Seaman, otherwiſe ſilly enough, who wondering thereat, cry'd out, *Sure now 'tis manifeſt there is a World above! And now with them 'tis the Fall of the Leaf.* But to proceed, I thought this made it manifeſt, whence many preternatural Showers have happen'd. I remember at Sir *Richard Atherton*'s in *Lancaſhire*, ſome few Years ago, there fell a great Number of the Seeds of Ivy-berries; at firſt we admir'd what they were, for they were cover'd with a thin

Skin that was red, and reſembled the Figure of a ſmall Wheat Corn; but afterwards they fully manifeſted what they were; for many ſprouted and took Root. I ſuppoſe they were carry'd aloft by ſome ſuch Whirl-wind, and let fall there. I have purpoſely gone into the Place where I perceived this Guſt, which is notorious enough by the Noiſe it makes, with ratling the Leaves as it carries them aloft, and have found a fine ſharp Breeze of Wind.

Yours, &c.

Mr.

Mr. Clayton's *ſecond Letter, containing his farther Obſervations in* Virginia.

BEing honour'd with the Thanks of the Society for my laſt, and receiving by my worthy Friend Dr. *Moulin* their Commands to proceed, I have added here my Obſervations of the Waters, and part of the Earth and Soil. I ſhall wave both Complements and Apologies, ſince I have greater Reſpect and Honour for the Society than I can poſſibly expreſs, and have no reaſon to ſuſpect their Favour, whoſe Candidneſs I ſo ſignally proved in my laſt.

Of the WATER.

'TWixt the two Capes, the Southern, called *Cape Henry*, the more Northerly, called *Cape Charles*, there runs up a great Bay, called the Bay of *Cheeſepeak*; nine Leagues over in ſome places; in moſt ſeven, which lying Weſt, Nore and South, divides *Virginia* into two unequal Parts. On the Eaſt Side of this Bay there lies a narrow Neck of Land, which makes the Counties

of *Northampton* and *Accomack*. On the West Side of the Bay there branch forth four great Rivers, *James River*, *York River*, *Rapahanack* and *Potomack*, that rise from a Ridge of Mountains, whereof more in the Sequel. These Rivers plentifully water all the other Parts of *Virginia*, emptying themselves into the great Bay. The Mouth of *James River*, which is the most Southerly of them, and the Mouth of *Potomack*, which is the most Northerly, may be a hundred Miles Distance: But as I have been credibly inform'd that the Falls of *James River* are not past thirty Miles from *Potomack*, which is a vast large River nine Miles over in many Places. I have been told it was navigable nigh two hundred Miles, much higher than any of the other Rivers: Whence I conclude, in future Times, it will be the most considerable for Trade when the Country comes to be inhabited further up into the main Land. The other Rivers are much about three Miles over a-piece. And *James River* is navigable at least eighty Miles. Within four or five Miles of *James Town*, *James River* and *York River* are not past four or five Miles asunder. Yea, Sloops of considerable Carriage may sail up the Branches of the two Rivers, till they come within a Mile the one of the other; for I take it to be no more from Collonel *Bollard*'s to Major *Troop*'s Landing, and I believe they may come much about as near again as Collonel *Cole*'s, and several other Places. *York River* is distant from *Rapahanack* in some Places not past ten or twelve Miles, *Rapahanack* from *Potomack*

not

not paſt ſeven Miles in one Place, tho' it may be ſixty in others. The Heads of the Branches of the Rivers interfere and lock one within another, which I think is beſt expreſſed after the Manner that an *Indian* explained himſelf once to me, when I enquired how nigh the Rivers of *Carolina*, *Virginia* and *Maryland* aroſe out of the Mountains, from thoſe that ran Weſterly on the other Side of the Mountains, he clapt the Fingers of one Hand 'twixt thoſe of the other, crying, they meet thus; the Branches of different Rivers riſing not paſt a hundred Paces diſtant one from another: So that no Country in the World can be more curiouſly watered. But this Conveniency, that in future Times may make her like the *Netherlands*, the richeſt Place in all *America*, at the preſent I look on the greateſt Impediment to the Advance of the Country, as it is the greateſt Obſtacle to Trade and Commerce. For the great Number of Rivers, and the Thinneſs of the Inhabitants, diſtract and diſperſe a Trade. So that all Ships in general gather each their Loading up and down an hundred Miles diſtant; and the beſt of Trade that can be driven is only a Sort of *Scotch* Pedling; for they muſt carry all Sorts of Truck that trade thither, having one Commodity to paſs off another. This (*i. e.*) the Number of Rivers, is one of the chief Reaſons why they have no Towns: for every one being more ſollicitous for a private Intereſt and Conveniency, than for a publick, they will either be for making forty Towns at once, that is, two in every

Country, or none at all, which is the Country's Ruin. But to return, the Tides in theſe Rivers regularly ebb and flow about two Foot perpendicular at *James Town*; there is there, as they call it, a Tide and half Tide; that is, it flows near two Hours along by the Shore, after that it is ebb in the Channel; and again, it ebbs near two Hours by the Shore, after that it is Flood in the Channel. This is great Advantage to the Boats paſſing up and down the River. I ſuppoſe this is cauſed by many Creeks and Branches of the Rivers, which being conſiderable many, tho' only three or four Miles long, yet as broad as the *Thames* at *London*, others ten Miles long, ſome above twenty, that have little freſh Water which they carry of their own, but their Current primarily depending upon the Flux and Re-flux of the Sea. So that after the Tide is made in the Channel, it flows by the Shore a conſiderable Time afterwards, being that thoſe Creeks are ſtill to fill, and therefore as it were draws up a Source upwards by the Shore; and likewiſe when the Tide returns in the Channel, the Creeks that could not ſo readily diſburſe their Water, being ſtill to empty themſelves, they make an Ebbing by the Shore a conſiderable Time after that it is Flood, as I ſay, in the Channel. So far as the ſalt Waters reach the Country is deemed leſs healthy. In the Freſhes they more rarely are troubled with the Seaſonings, and thoſe endemical Diſtempers about *September* and *October*. This being very remarkable, I refer the Reaſon to the more piercing

Genius

Genius of thoſe moſt judicious Members of the Society: And it might perhaps be worthy the Diſquiſition of the moſt Learned to give an Account of the various Alterations and fatal Effects that the Air has on humane Bodies, eſpecially when impregnated with a marine Salt; more peculiarly when ſuch an Air becomes ſtagnant: This might perhaps make ſeveral beneficial Diſcoveries, not only in Relation to thoſe Diſtempers in *America*, but perhaps take in your *Kentiſh* Agues, and many others remarkable enough in our own Nation. I lately was making ſome Obſervations of this Nature, on a Lady of a delicate Conſtitution, who living in a clear Air, and removing towards the Sea-Coaſt, was lamentably afflicted therewith, which both my ſelf and others attributed to this Cauſe, ſhe having formerly upon her going to the ſame, been ſeized in the ſame Manner. But to return: There is one thing more in reference to this very thing very remarkable in *Virginia*; generally twice in the Year, Spring and Fall, at certain Spring-Tides, the moſt of the Cattle will ſet on gadding, and run, tho' it be twenty or thirty Miles, to the River to drink the ſalt Water, at which Time there's ſcarce any ſtopping of them; which the People know ſo well, that if about thoſe Times their Herds are ſtrayed from their Plantations, without more Sollicitation they go directly to the Rivers to fetch them home again. As for the Waters in the Springs in general, they are, I think, ſomewhat more eager than thoſe in *England*. In that I have obſerved,

they

they require ſome Quantity more of Malt to make ſtrong Beer than our *Engliſh* Waters, and will not bear Soap. I have try'd ſeveral by infuſing of Galls, and found little difference in the Colours, turning much what the Colour of common Sack in Taverns. I tried two Wells at Collonel *Bird*'s by the Falls of *James River*, ſeveral Wells near *James Town*, ſome Springs in the *Iſle of Wight County*: There's a Spring in the *Iſle of Wight*, or *Nanzamond County*, vents the greateſt Source of Water I ever ſaw, excepting *Holy-Well* in *Wales*, but I had not Opportunity to make Experiments thereof. I tried likewiſe ſome Springs on the Banks of *York River*, in *New Kent* and *Gloceſter County*, but found them vary very little as to Colour. I could not try any thing as to their ſpecifick Gravity, having neither Aquapoiſe, nor thoſe other Glaſſes I had contrived peculiarly for making ſuch Experiments, they being all loſt with my other things. I had Glaſſes blown would hold about five Ounces, others about ten Ounces, with Necks ſo ſmall, that a Drop would make a conſiderable Variation; with theſe I could make much more critical and ſatisfactory Obſervations as to the ſpecifical Gravity of Liquors, having critical Scales, than by any other Way yet by me tried. I uſed this Method to weigh Urines, which Practice I would recommend to the inquiſitive and critical Phyſicians. I had made many Obſervations hereof, but all Notes were likewiſe loſt with my other things. Yet I have begun afreſh; for there are more ſignal

nal Variations in the Weights of Urines than one would at firſt imagine; and when the Eye can diſcover little, but judge two Urines to be alike, they may be found to differ very much as to Weight. By Weight I find Obſervations may be made of Affections in the Head, which rarely make any viſible Alterations in the Urine. I have found two Urines not much unlike differ two and twenty Grains in the Quantity of about four or five Ounces: But let them that make theſe Eſſays weigh all their Urines when cold, leſt they be thereby deceiv'd. But to return to the Spring Waters in *Virginia*. There's a Spring at my Lady *Berkley*'s, called *Green-Spring*, whereof I have been often told, ſo very cold, that 'tis dangerous drinking thereof in Summer-time, it having proved of fatal Conſequence to ſeveral. I never tried any thing of what Nature it is of.

There be many petrifying Waters; and indeed I believe few of the Waters but participate of a petrifying Quality, tho' there be few Pebbles or paving Stones to be found in all the Country. But I have found many Sticks with cruſty Congelations round them in the Ruins of Springs, and Stones figured like Honey-Combs, with many little Stars as it were ſhot in the Holes. And nothing is more common than petrify'd Shells, unleſs you would determine that they are Parts of natural Rock ſhot in thoſe Figures, which indeed I rather think; but thereof hereafter. Mr. Secretary *Spencer* has told me of ſome Waters participating much of *Alome* or *Vitriol* towards *Potomack*. Up be-

yond the Falls of *Rapahanack* I have heard of poiſonous Waters. But theſe I only mention as a Hint to further Enquiry of ſome others, for I can ſay nothing of them my ſelf.

A Continuation of Mr. John Clayton's *Account of* Virginia.

Of the Earth and Soil.

WHEN you make the Capes of *Virginia*, you may obſerve it low Land, ſo that at ſome Diſtance the Trees appear as if they grew in the Water; and as you approach nigher to emerge thence. For a hundred Miles up into the Country, there are few Stones to be found, only in ſome Places, Rocks of Iron Oar appear, which made me expect to have found many Waters turn Purple with Galls, but never met with any. Providence has ſupplied the common Uſe of Stones, by making the Roads very good: So that they ride their Horſes without ſhoeing them; which yet are more rarely beaten on their Feet, than ours are in *England*, the Country and Clime being dry, their Hoofs are much harder; for I obſerved, that take a Horſe out of the wet Marſhes, and Swamps, as they there call them, and ride him immediately, and he'll quickly be tender-footed. In ſome Places, for ſeveral Miles together, the Earth is ſo intermix'd with Oyſter-ſhells, that there may ſeem as many Shells as Earth; and how deep they lie thus intermingled, I think, is not yet known: For at broken Banks they diſcover themſelves

to

to be continued many Yards perpendicular. In ſeveral Places theſe Shells are much cloſer, and being petrified, ſeem to make a Vein of a Rock. I have ſeen in ſeveral Places, Veins of theſe rocky Shells, three or four Yards thick, at the Foot of a Hill, whoſe Precipice might be twenty Yards perpendicular, whoſe Delf, I ſuppoſe, ſhot under the Hill; pieces of theſe Rocks broken off, lie there, which, I ſuppoſe, may weigh twenty or thirty Tuns a-piece, and are as difficult to be broken as our Free-ſtone. Of theſe Rocks of Oyſter-ſhells that are not ſo much petrified, they burn and make all their Lime; whereof they have that ſtore, that no Generation will conſume. Whether theſe were formerly Oyſters, which left by the ſubſiding Seas, (as ſome ſuppoſe, that all that Tract of Land, now high Ground, was once overflowed by the Sea) were ſince petrified, or truly Stones, *ſui Generis*, I leave to the honourable Society to determin. But when I conſider the conſtant and diſtinct Shooting of ſeveral Salts, Nature's Curioſity, in every thing, ſo far exceeding that of Art, that the moſt ingenious, when referr'd thereto, ſeem only endued with an apiſh Fondneſs, I cannot think any thing too difficult or wonderful for Nature; and indeed I do not apprehend, why it may not be as feaſible to ſuppoſe them to have been Rocks, at firſt ſhot into thoſe Figures, as to conceive the Sea to have amaſs'd ſuch a vaſt Number of Oyſter-ſhells one upon another, and afterwards ſubſiding, ſhould leave them cover'd with ſuch Mountains of Earth, under which they

ſhould

ſhould petrify: But not to launch forth too far into thoſe Diſputes, ſince I muſt modeſtly remember to whom I write. Often, in the looſer Banks of Shells and Earth, are found perfect Teeth petrified, ſome whereof I have ſeen, could not be leſs than two or three Inches long, and above an Inch broad: Tho' they were not maxillary Teeth, the Part that one might ſuppoſe grew out of the Jaw, was poliſhed, and black, almoſt as Jett; the Part which had been faſten'd in the Jaw and Gums, was brown, and not ſo ſhiningly poliſhed, or ſmooth; if they were, as they ſeemed to be, really Teeth, I ſuppoſe, they muſt have been of Fiſhes. The Back-bone of a Whale, and as I remember, they told me of ſome of the Ribs, were digg'd out of the Side of a Hill, ſeveral Yards deep in the Ground, about four Miles diſtant from *James Town*, and the River. Mr. *Baniſter*, a Gentleman pretty curious in thoſe things, ſhew'd me likewiſe the Joynt of a Whale's Back-bone, and ſeveral Teeth, ſome whereof, he ſaid, were found in Hills beyond the Falls of *James River*, at leaſt, a hundred and fifty Miles up into the Country. The Soil in general is ſandy: I had deſigned, and I think it might be worth a critical Remark, to obſerve, the difference of Soils ſeem appropriated to the ſeveral Sorts of Tobacco: For there is not only the two diſtinct Sorts of a ſweet-ſcented, and Aranoko Tobacco, but of each of theſe be ſeveral Sorts much different, the Seeds whereof are known by diſtinct Names, they having given them the Names of thoſe Gen-

Gentlemen moſt famed for ſuch Sort of Tobacco, as of *Prior* Seed, *&c.* Nay, the ſame Sort of Seed in different Earths, will produce Tobacco much different, as to Goodneſs. The richer the Ground, the better it is for Aranoko Tobacco, whoſe Scent is not much minded, their only Aim being to have it ſpecious, large, and to procure it a bright Kite's Foot Colour. Had not my Microſcopes, *&c.* Tools to grind Glaſſes, been caſt away, with my other things, I had made ſome critical Enquiries into their ſeveral Natures, I would have examined what Proportions of Salts, all the Sorts of Earths had afforded, and how Water impregnated with their Salts, would have changed with infuſing Galls, how with the Syrup of Violets, and how they would have precipitated Mercury, or the like, and ſo far forth as I had been able, examined them by the ſeveral Tryals of Fire. I conceive Tobacco to be a Plant abounding with nitro-ſulphureous Particles; for the Planters try the Goodneſs of their Seed, by caſting a little thereof into the Fire; if it be good, it will ſparkle after the Manner of Gun-powder: So will the Stalks of Tobacco-leaves, and perhaps has ſomething analagous to the narcotick Sulphur of *Venus*, which the Chymiſts ſo induſtriouſly labour after. The World knows little of the Efficacy of its Oil, which has wonderful Effects in the curing of old inveterate Sores, and ſcrophulous Swellings, and ſome, otherwiſe applied and qualified. The Goodneſs of Tobacco I look on primarily conſiſts in the Volatility of its Nitre: And hence the

ſandy Grounds that are moſt impregnated therewith, and whoſe nitrous Salt is moſt volatile, for ſuch Grounds are quickliest ſpent, yield Tobacco's that have the richeſt Scent and that ſhortly become a pleaſant Smoak; whereas, in Tobacco that grows on ſtiff Ground, the Salts ſeem more fix'd, and locked up in the Oyl, ſo that whilſt new, 'tis very heady and ſtrong, and requires ſome time for its Salts to free themſelves, and become volatile; which it manifeſts, by its having an urinous Smell. The ſame Reaſon ſatisfies, why Tobacco that grows on low Lands as far as the Salts, tho' the Plant be never overflowed with ſalt Water, yet the Ground that feeds the Plant being impregnated with ſalt Water, that Tobacco ſmoaks not pleaſantly, and will ſcarcely keep Fire; but do all that a Man can, will oft go out, and gives much trouble in frequent lighting the Pipe, 'till after it has been kept ſome conſiderable Time: Which may be aſſign'd to the more fixt ſaline Particles of the marine Salt in theſe Plants; which require more time ere they be rendered volatile. Here it might be worthy of an Enquiry into the nature of Filtration of Plants, ſince we may hence gather, Particles of the marine Salt are carried along with the *Succus Nutritius* of the Plant; concerning which, if it were not too much to deviate from the Matter in hand, I ſhould offer ſome Reflections of my own, which the learned Society might perhaps improve: For I think thence might be made many happy Conjectures as to the Virtues of Plants. So where we ſee Plants,

of Trees of an open Pore growing low, we ſhall find their Juice has ſubtile Parts; So have all Vines, whether the grape Vine, or briony, or a ſmilax, or the like. If a gummous Plant or Tree, that grows low, and cloſe pored, it abounds with acid Spirits, as *Lignum Vitæ*, &c. if it grow tall, and be open pored, it abounds with a ſubtile volatile Spirit, as your Firs, and the Turpentine Tree. But to inſiſt no further herein, than as this may be applicable to the preſent Diſcourſe: For I have obſerved, that that which is called Pine-wood Land, tho' it be a ſandy Soil, even the ſweet-ſcented Tobacco that grows thereon, is large and porous, agreeable to Aranoko Tobacco, and ſmokes as coarſely as Aranoko: Wherefore 'tis, that I believe the Microſcope might make notable Diſcoveries towards the Knowledge of good Tobacco: For the cloſer the Compoſition of the Leaf, the better the Tobacco; and therefore the Planters and Merchants brag of the Subſtance of their Tobacco; which Word, did they always take it in a true Senſe, for the Solidneſs, and not miſtake it for the Thickneſs, it would be more conſonant to a true Obſervation: For as I ſaid of the Pine-wood Tobacco, ſome of it is thick and not ſolid, and differs from the beſt Tobacco, as Buff does from tanned Leather; ſo that if the Tobacco be ſound and not rotten, you may give a great gueſs at the Goodneſs of Tobacco, when you weigh the Hogſheads, before you ſee them: For if an equal Care be taken in the packing of them, the beſt Tobacco will weigh the heavieſt,

and

and pack the cloſeſt. Now I ſaid, that the ſweet-ſcented Tobacco moſt in vogue, which was moſt famed for its Scent, was that which grew on ſandy Land; which is true, if you would ſmoak it whilſt new, or whilſt only two or three Years old; but if you keep the ſtiff Land Tobacco, which is generally a Tobacco of great Subſtance five or ſix Years, it will much excel: for tho' the ſandy Land Tobacco abound with a volatile Nitre at firſt, yet the ſtiff Land Tobacco abounds with a greater Quantity of Nitre, only that it is locked up in its Oyl at firſt, and requires more time to extricate it ſelf, and become volatile; but the Pine-wood Land having little of the Nitro-ſulphureous Particles, neither is, nor ever will make any thing of a rich Smoak. Diſcourſing hereof ſome Days ſince, to a Gentleman of good Obſervation, that has been verſed with maulting, he aſſured me, to back this my Suppoſition, or Hypotheſis, he had obſerved, that Barley that grew on ſtiff Ground, required more time conſiderably to mellow, and come to Perfection, than that which grew on light Land. Having proceeded thus far to ſpeak of Tobacco, I ſhall add one or two things more. The Planters differ in their Judgments about the time of planting, or pitching their Crops: Some are for pitching their Crops very early, others late, without any Diſtinction of the nature of the Soils; and 'tis from the different Effects that they find, in that, ſometimes early, ſometimes the late planting ſucceeds: But they have not the reaſon to judge of the Cauſe, to conſider the Accidents

of the Year, and the difference of the Soils. In ſandy Grounds they need not ſtrive ſo much for early Planting, the Looſeneſs of the Earth, and the kind natur'd Soil, yielding all that it can, eaſily and ſpeedily, and Sand retaining the Heat, makes the Plants grow faſter. But in ſtiff Soils, if the Crops be not early pitched ſo that during the Seaſon of Rains it have got conſiderable Roots, and ſhot them ſome depth, if early Droughts come, it ſo binds the Land, that the Roots never ſpread or ſhoot deeper, or further than the Hill that they are planted in: For they plant them as we do Cabbages, raiſing Hills to ſet every Plant in, about the bigneſs of a common Mole-hill: obſerving this on the Plantation where I lived, that it was ſtiff Ground, I adviſed them to plant their Crops as early as poſſible; and in order thereunto, I tried ſeveral ways to further the Plants; but not to trouble you with the ſeveral Experiments that I made, in reference thereto: What I found moſt advantageous was, by taking an Infuſion of Horſe-dung, and putting thereon Soot, and then my Seeds; this I kept forty eight Hours in an ordinary digeſtive Heat, I had two Beds left me to ſow, in the midſt of thoſe the People ſowed, and the quantity of Seed that they generally allotted to the ſame Quantity of Ground; when I ſowed, I mix'd Aſhes with the Seed, having decanted the Liquor, that the Seed might ſow the evener: The effect was, that my Plants came up much ſooner, grew ſwifter, and I had five Plants for one more than any of the other Beds bore;

bore; I left the Country ſhortly after, and ſo no certainty of the final Reſult. There are various Accidents and Diſtempers, whereunto Tobacco is liable, as the Worm, the Fly, firing to turn, as they call them, Frenchmen, and the like. I propoſed ſeveral ways to kill the Worm and Fly, as by Sulphur and the like; but had no Opportunity to experiment it: I ſhall ſet down that I had moſt hopes of, which perhaps may give a Hint to others to try or improve. Tobacco-ſeed is very ſmall, and by conſequence ſo is the young Plant at firſt, that if gloomy Weather happen at that time, it breeds a ſmall Fly, which conſumes the Plume of the Plant; now it being early in the Year when they ſow the Seed, *viz.* about the fourteenth of *January*, they cover the Ground, to ſecure, as well as they can, their tender Plants, from the niping Froſts, that may happen in the Nights; they cover them only with a few Oak-leaves, or the like; for Straw they find apt to harbour and breed this Fly: I therefore would adviſe them to ſmoak Straw with Brimſtone, once in two or three Nights, and ſo they might cover them ſecurely, with that which would preſerve them infinitely beyond the Covering with Oak-boughs; indeed, I would adviſe them to keep peculiarly ſo much of their *Indian* Corn-blades, which they gather for their Fodder, for this very purpoſe, being, as I conceive, much the beſt, there being no Chaff to foul their Beds, and prejudice them when they ſhould weed them. What they call firing is this: When Plants are of ſmall Subſtance, as when there has

been a very wet and cold Seaſon, and very hot Weather ſuddenly enſues, the Leaves turn brown, and dry to Duſt: The Cauſe I conceive to be hence: The Plant being feeble, and having a ſmall quantity of Oyl, which makes the more ſolid part of the Plant, the Earth being ſuddainly heated by the Sun's fiercer Beams, the Roots are rather ſcorched and dried up in the Earth, than nouriſhed; ſo that the Plant conſiſting only of watry parts, is conſumed, as it were by Fire: ſometimes hopeful Plants, when by a ſudden Guſt ſome Maſter Veins are broken; if ſuddain Heat enſues, they likewiſe fire: For being not come to Maturity, and being deprived of the Supports of Life and Vegetation they likewiſe periſh, are dried up, and fall to Duſt. *French-men* they call thoſe Plants, whoſe Leaves do not ſpread and grow large, but rather ſpire upwards, and grow tall; theſe Plants they don't tend, being not worthy their Labour. Were they ſo critical, I believe, they might have great gueſs what Plants were moſt likely to turn *French-men*, by obſerving whether the Roots of the Plants run downwards, as thoſe whoſe Branches are apteſt to ſpire upwards: For tho I have not made poſitive Proof thereof, I have ſomething more than bare Fancy for my Conjecture; I have pulled up ſome of theſe *French-men*, and compared them with the Roots of ſome other Plants, and found them much longer than others; and 'tis obſervable, looſe Soils, and ſandy Ground are more ſubject thereto than the ſtiff Land. The Country of it ſelf is one entire Wood, conſiſting

conſiſting of large Timber Trees of ſeveral ſorts, free from Thickets or Under-Wood, the ſmall Shrubs growing only on Lands that have been clear'd, or in Swamps; and thus it is for ſeveral hundreds of Miles, even as far as has yet been diſcovered. But that ſhall be reſerved 'till another Opportunity.

I am, &c.

Mr. John Clayton, *Rector of* Croſton *at* Wakefield, *his Letter to the* Royal Society, *giving a farther Account of the Soil, and other Obſervables of* Virginia.

I Shall here preſent you with a continuation of my Remarks on the River, Soil, and Plants of *Virginia*. And firſt, as to the River on the other ſide the Mountains, ſaid to ebb and flow. I have been aſſured by Col. *Bird*, who is one of the moſt intelligent Gentlemen in all *Virginia*, and knows more of *Indian* Affairs than any Man in the Country, that it was a Miſtake; for that it muſt run into a Lake, now called *Lake Petite*, which is freſh Water; for ſince that time a Colony of the *French* are come down from *Canada*, and have ſeated themſelves on the back of *Virginia*, where *Fallam* and the reſt ſuppoſed there might be a Bay, but is a Lake, to which they have given the Name of *Lake Petite*, there being ſeveral larger Lakes 'twixt that and *Canada*. The *French* poſſeſſing themſelves of theſe Lakes, no doubt will in ſhort time be abſolute Maſters of the beaver Trade, the greateſt number of Beavers being catch'd there.

there. The Colonel told me likewiſe, that the common Notion of the Lake of *Canada*, he was aſſured was a Miſtake, for the River ſuppoſed to come out of it, had no Communication with any of the Lakes, nor the Lakes one with another, but were diſtinct. But not to ramble after here-ſay, and other matters; but to return to the parts of *Virginia* inhabited by the *Engliſh*, which in general is a very fertile Soil, far ſurpaſſing *England*, for there *Engliſh* Wheat (as they call it, to diſtinguiſh it from *Maze*, commonly called *Virginia* Wheat) yields generally 'twixt Fifteen and Thirty fold, the Ground only once plow'd; whereas 'tis a good Crop in *England* that yields above eight Fold, after all their Toil and Labour. And yet in truth 'tis only the barrenneſt Parts that they have cultivated, by tilling and planting only the High-Lands, leaving the richer Vales unſtirr'd, becauſe they underſtand not any thing of Draining. So that the richeſt Meadow-Lands, which is one third of the Country, is Boggy, Marſh, and Swamp, whereof they make little Advantage, but loſe in them abundance of their Cattle, eſpecially at the firſt of the Spring, when the Cattle are weak, and venture too far after young Graſs. Whereas vaſt Improvements might be made thereof; for the generality of *Virginia* is a ſandy Land with a ſhallow Soil: ſo that after they have clear'd a freſh piece of Ground out of the Woods, it will not bear Tobacco paſt two or three Years, unleſs Cow-pened; for they manure their Ground by keeping their

their Cattle, as in the South you do your Sheep, every Night confining them within Hurdles, which they remove when they have ſufficiently dung'd one ſpot of Ground; but alas! they cannot improve much thus, beſides it produces a ſtrong ſort of Tobacco, in which the Smoakers ſay they can plainly taſte the fulſomneſs of the Dung. Therefore every three or four Years they muſt be for clearing a new piece of Ground out of Woods, which requires much Labour and Toil, it being ſo thick grown all over with maſſy Timber. Thus their Plantations run over vaſt Tracts of Ground, each ambitious of engroſſing as much as they can, that they may be ſure to have enough to plant, and for their Stocks and Herds of Cattle to range and to feed in; that Plantations of 1000, 2000, or 3000 Acres are common, whereby the Country is thinly inhabited; the Living ſolitary and unſociable; Trading confuſed and diſperſed; beſides other Inconveniences: Whereas they might improve 200 or 300 Acres to more Advantage, and would make the Country much more healthy; for thoſe that have 3000 Acres, have ſcarce cleared 600 Acres thereof, which is peculiarly term'd the Plantation, being ſurrounded with the 2400 Acres of Wood: So that there can be no free or even Motion of the Air, but the Air is kept either ſtagnant, or the lofty ſulphureous Particles of the Air, that are higher than the tops of the Trees, which are above as high again as the generality of the Woods in *England*, deſcending when they paſs over the cleared Spots of Ground, muſt

muſt needs in the violent Heat of Summer, raiſe a preternatural Ferment, and produce bad Effects. Nor is it any Advantage to their Stocks, or Crops; for did they but drain their Swamps, and Low-lands, they have a very deep Soil, that would endure planting twenty or thirty Years, and ſome would ſcarce ever be worn out, but the longer the better, for they might lay them all Winter, or when they pleaſed in Water, and the Product of their Labour would be double or treble, whether Corn or Tobacco; and that this is no fond Projection, (though when I have diſcourſed the ſame to ſeveral, and in part ſhewn them how their particular Grounds might be drained at a very eaſie rate) they have either been ſo conceited of their old way, ſo ſottiſh as not to apprehend, or ſo negligent as not to apply themſelves thereto. But on the Plantation where I lived, I drain'd a good large Swamp, which fully anſwered Expectation. The Gentlewoman where I lived, was a very acute ingenious Lady, who one Day diſcourſing the Overſeer of her Servants, about pitching the enſuing year's Crop; the Overſeer was naming one place where he deſigned to plant 30000 Plants, another place for 15000, another for 10000, and ſo forth, the whole Crop deſigned to be about 100000 Plants: Having obſerved the Year before he had done the like, and ſcattered his Crop up and down the Plantation, at Places a Mile, or a Mile and a half aſunder, which was very inconvenient, and whereby they loſt much time. I interpoſed, and aſked, why they did not plant

plant all their Crop together? The Fellow ſmiled as it were at my Ignorance, and ſaid, there was very good Reaſon for it. I replied, that was it I enquired after. He returned, the Plantation had been an old planted Plantation, and being but a ſmall Plot of Ground, was almoſt worn out, ſo that they had not Ground all together that would bring forth Tobacco. I told him then they had better Ground than ever yet they had planted, and more than their hands could manage. He ſmil'd again, and aſked me, where? I then named ſuch a Swamp. He then ſaid ſcornfully, he thought what a Planter I was; that I underſtood better how to make a Sermon, than managing Tobacco. I replied with ſome warmneſs, tho' I hoped ſo, that was Impertinence, and no Anſwer. He then ſaid, that the Tobacco there would drown, and the Roots rot. I replied, that the whole Country would drown if the Rivers were ſtopt, but it might be laid as dry as any Land on the Plantation. In ſhort, we diſcourſed it very warmly, till he told me, he underſtood his own Buſineſs well enough, and did not deſire to learn of me. But the Gentlewoman attended ſomewhat better to my reaſoning, and got me one Day to go and ſhew her how I projected the draining of the Swamp, and thought it ſo feaſible, that ſhe was reſolved to have it done; and therefore deſired me I would again diſcourſe her Overſeer, which I did ſeveral times, but he would by no means hearken thereto, and was ſo poſitive, that ſhe was forced to turn him away, to have her Servants ſet about the

the Work; and with three Men in thirteen Days I drained the whole Swamp, it being ſandy Land, ſoaks and drains admirably well, and what I little expected, laid a Well dry at a conſiderable diſtance. The Gentlewoman was in *England* laſt Year, and I think Dr. *Moulin* was by when ſhe aſked me, to teach her how ſhe might make her Tobacco that grew in the Swamp leſs, for it produced ſo very large, that it was ſuſpected to be of the *Aranoko* kind: I told her, though the Complaint was rare, yet there was an excellent Remedy for that, in letting every Plant bear eight or nine Leaves inſtead of four or five, and ſhe would have more Tobacco, and leſs Leaves. Now you muſt know they top their Tobacco, that is, take away the little top-bud, when the Plant has put forth as many Leaves as they think the richneſs of the Ground will bring to a Subſtance; but generally when it has ſhot forth four or ſix Leaves. And when the top-bud is gone, it puts forth no more Leaves, but Side-branches, which they call Suckers, which they are careful ever to take away, that they may not impoveriſh the Leaves. I have been more tedious in the Particulars, the fullier to evince how reſolute they are and conceitedly bent to follow their old Practice and Cuſtom, rather than to receive Directions from others, tho' plain, eaſie and advantageous. There are many other Places as eaſie to drain as this, tho' of larger Extent, and richer Soil, for ſome of which I have given Directions, and have only had the return perhaps of a flout after-

wards: Even in *James Town Iſland*, which is much-what of an oval Figure, there's a Swamp runs diagonal-wiſe over the Iſland, whereby is loſt at leaſt 150 Acres of Land, which would be Meadow, and would turn to as good Account as if it were in *England:* Beſides it is the great Annoyance of the Town, and no doubt but makes it much more unhealthy. If therefore they but ſcoured the Channel, and made a pretty ordinary Trench all along the middle of the Swamp, placed a Sluce at the Mouth, where it opens into the back Creek; for the Mouth of the Channel there is narrow, has a good hard Bottom, and is not paſt two Yards deep when the Flood is out; as if Nature had deſigned it beforehand: They might thus drain all the Swamp abſolutely dry, or lay it under Water at their pleaſure. I have talked ſeveral times hereof to Mr. *Sherwood*, the Owner of the Swamp, yet nothing is eſſayed in order thereto. And now ſince we are ſpeaking of *James Town*, give me leave to adjoyn ſome Reflections as to the Situation and Fortifications of the Place. The natural Situation of the Place is ſuch, as perhaps the World has not a more commodious Place for a Town where all things conſpire for Advantage thereof.

James Town Iſland is rather a *Peninſula*, being joyned to the Continent by a ſmall Neck of Land, not paſt twenty or thirty Yards over, and which at Spring-tides is overflowed and is then an abſolute Iſland. Now they have built a ſilly ſort of a Fort, that *is*, a brick Wall in the ſhape of a Half-Moon, at the beginning of the Swamp, becauſe the

Channel of the River lies very nigh the Shoar; but it is the ſame as if a Fort were built at *Chelſea* to ſecure *London* from being taken by Shipping. Beſides Ships paſſing up the River are ſecured from the Guns of the Fort, till they come directly over-againſt the Fort, by reaſon the Fort ſtands in a Vale, and all the Guns directed down the River, that ſhould play on the Ships, as they are coming up the River, will lodge their Shot within ten, twenty, or forty Yards in the riſing Bank, which is much above the Level of the Fort; ſo that if a Ship gave but a good Broad-ſide, juſt when ſhe comes to bear upon the Fort, ſhe might put the Fort into that Confuſion, as to have free Paſſage enough. There was indeed an old Fort of Earth in the Town, being a ſort of *Tetragone*, with ſomething like Baſtions at the four Corners, as I remember; but the Channel lying further off to the middle of the River there, they let it be demoliſhed, and built that new one ſpoke of, of Brick, which ſeems little better than a blind Wall, to ſhoot wild Ducks or Geeſe.

If they would build a Fort for the Security of the Town and Country, I conceive it ſhould be on *Archer*'s *Hope Point*, for that would ſtop the Ships from paſſing up the River, before they come to the Town, and would ſecure the Town from being blocked up by Sea. The Channel at *Archer*'s *Hope Point* lies cloſe by the Shoar, and makes ſuch an Angle there by reaſon of *Hog Iſland*, that going up or down the River, let the Wind be where it will, they muſt there bring the contrary Tack

on

on Board, and generally when they about the Ship as they call it, they are ſo near the Shoar, that a Man may almoſt fling a Finger-ſtone on Board. How much this hinders the Motion of a Ship, and what Confuſion it muſt be to them to bring a contrary Tack on Board, whilſt they have all the Guns of a Fort playing ſo nigh upon them, may readily be conceived. *Archer*'s *Hope* is a neck of Land, that runs down three Miles long, not much paſt half a Mile broad betwixt the main River and *Archer*'s *Hope Creek*, which has large Marſhes and Swamps; ſo that a Citadel built upon the Point, would almoſt be impregnable, being it could be attack'd no way but one, which is ſo narrow a ſlender Neck of Land, that it would be difficult to take it that way: And it would ſecure *James Town* from being blocked, being it would not be paſt a Mile by Water, to the Point of *James Town Iſland*. The Iſland is ſo ſurrounded with Water and marſhy Land, that the Town could never be bomb'd by Land. But now to return to the Reflections of improving, and manuring of Land in *Virginia*; hitherto, as I have ſaid, they have uſed none but that of Cow-penning; yet I ſuppoſe they might find very good Marl in many Places, I have ſeen both the red and blew Marl at ſome Breaks of Hills: This would be the propereſt Manure for their ſandy Land, if they ſpread it not too thick, theirs being, as I have ſaid, a ſhallow, ſandy Soil, which was the Reaſon I never adviſed any to uſe Lime, tho' they have very good Lime of Oyſter-ſhells; but that's

that's the propereſt Manure for cold Clay Land, and not for a ſandy Soil. But as moſt Lands have one Swamp or another bordering on them, they may certainly get admirable Slitch, wherewith to manure all their Uplands. But this, ſay they, will not improve Ground, but clods and grows hard; 'tis true, it will do ſo for ſome time, a Year or two at the firſt; but did they caſt it in heaps, and let it lie for two or three Years after a Froſt or two had ſeized it, and it had been well peirced therewith, I doubt not it would turn to good Account: And for this too I have ſomething more than bare Conjecture; for diſcourſing it once with a good notable Planter, we went to view a Heap thereof, that caſually he had caſt up 'twixt three and four Years before, and we found it not very binding, but rather a fine natural Mould, whereupon he did confeſs, he then remembred that out of a Ridge of the like Mould he had very large Plants, which muſt have been of the like Slime or Slitch caſt up before: But ſaid, that himſelf and others deſpaired of this Manure, becauſe they had taken of this Slitch freſh and moiſt out of the Swamp, and fill'd Tobacco Hills with it, and in the midſt of it planted their Plants, which ſo bound the Roots of their Plants, that they never came to any thing. But he ſaid, he then ſaw his Error, yet I have not heard he has remembred to correct it. But 'tis ſtrange in how many things beſides they are remiſs, which one would think *Engliſh* Men ſhould not be guilty of. They neither Houſe nor Milk any of their Cows in Win-

ter, having a Notion that it would kill them; yet I perſuaded the afore-mentioned Lady where I lived, to milk four Cows the laſt Winter that I ſtaid in the Country, whereof ſhe found ſo good effect, that ſhe aſſured me ſhe would keep to my Advice for the future; and alſo as I had further urged, houſe them too, for which they have mighty Conveniences, their Tobacco Houſes being empty ever at that time of the Year, and may eaſily be fitted in two or three Days time without any Prejudice; whereby their Cattle would be much ſheltered from thoſe pinching ſharp Froſts that ſome Nights on a ſudden become very ſevere. I had another Project for the Preſervation of their Cattle proved very ſucceſsful; I urged the Lady to ſow her Wheat as early as poſſible ſhe could, ſo that before Winter it might be well rooted, to be early and flouriſhing at the firſt of the Spring: So that ſhe might turn thereon her weak Cattle, and ſuch as ſhould at any time be ſwamp'd, whereby they might be recruited and ſaved, and it would do the Wheat good alſo. I adviſed her likewiſe to ſave and carefully gather her *Indian* Corn-tops, and Blades, and all her Straw, whatever could be made Fodder, for her Cattle; for they get no Hay, tho' I was urging her to that too, and to ſow *Saintfoin*; for being a ſandy Soil, I am confident it would turn to very good Account. They have little or no Graſs in Winter, ſo that their Cattle are pined and ſtarved, and many that are brought low and weak, when the Spring begins, venture too far into the Swamps after

after the freſh Graſs, where they periſh; ſo that ſeveral Perſons loſe ten, twenty or thirty Head of Cattle in a Year: I obſerved this was much owing to their Inadvertency and Error in their way of managing and feeding them; for they get little Fodder, but as they think Corn being more nouriſhing, feed them with their *Indian* Corn, which they give them Morning and Evening; they ſpend thus a great Quantity of Corn, and when all's done, what ſignifies two or three Heads of Corn to a Beaſt in a Morning? it makes them only linger about the Houſes for more; and after that ſweet Food they are not ſo prompt to brouze on the Trees, and the coarſe Graſs which the Country affords; ſo that thus their Guts ſhrink up, and they become Belly-ſhot as they call it. I adviſed therefore never to give them any thing in a Morning, whereby as ſoon as they were ſet forth of the Cow-pens, they would fall a feeding, and tho' they filled their Bellies only with ſuch coarſe Stuff as had little Nouriſhment in it, yet it would keep out their Bellies, and they would have a better Digeſtion; and then when they were come home at Nights, to fodder them, beginning with Straw and their coarſeſt Fodder, which they would learn to eat by degrees, before they taſted that which was more delicate, and whilſt their Digeſtion was ſtrong, would yield them Nouriſhment to keep them ſtill ſo; afterwards when the Winter pinched, their fine Fodder then would ſtand them in ſtead; and hereby they might preſerve their weakeſt Cattle. By theſe Methods, and the Help of

the Wheat-patch, ſhe, the Gentlewoman where I lived, ſaved all her Cattle, and loſt not one in two Winters after, that I ſtaid there; beſides ſhe ſaved above Twenty Barrels of Corn, as I remember that ſhe told me ſhe uſed to ſpend upon her Stock; and a Barrel of Corn is commonly worth Ten Shillings. Nay further, the laſt Spring ſhe fed two Beaſts a Bullock and a Cow, fat, upon her Wheat, with the Addition only of a little boiled Corn, and yet the Wheat was ſcarce eat down enough. But to return again to the Nature of the Earth, which may be pretty well gathered from what I have already ſaid; I have obſerved, that at five or ſix Yards deep, at the Breaks of ſome Banks, I have found Veins of Clay, admirable good to make Pots, Pipes or the like of, and whereof I ſuppoſe the *Indians* make their Pipes, and Pots, to boil their Meat in, which they make very handſomely, and will endure the Fire better than moſt Crucibles: I took of this Clay, dryed, powdered, and ſifted it; powdered and ſifted Potſherds, and Glaſs; three parts, two parts and one part as I remember, and therewith made a large Crucible, which was the beſt I yet ever tried in my Life; I took it once red hot out of the Fire, and clapt it immediately into Water, and it ſtarted not at all. The Country abounds mightily with iron Oar, that as I have been aſſured by ſome upon Tryal, has been found very good. There are Rocks thereof appear at the precipice of Hills, at the foot whereof there runs a River fit for a Forge, and there's Wood enough to ſupply it

it with Charcoal; as I have heard there was formerly ſome Perſons undertook the Work, and when they had made but a ſmall Quantity of Iron, which proved very good, the *Indian* Maſſacre happened, and they being higher ſeated than the then inhabited Part of the Country, were all cut off, and the Works demoliſhed; ſo that it has frighted others I think from the like Attempt; beſides, ſuch a Work requires a greater Fund, and Bank of Money to carry it on, than any there are able to lay out; and for Perſons in *England* to meddle therewith, is certainly to be cheated at ſuch a Diſtance; ſome *Indians* brought Col. *Bird* ſome black Lead, whereof he told me there was great Store. There's very curious Chalk towards the Falls of *Rapahanock* River, which they burn, and make a delicate White-waſh of it. The Secretary of State Col. *Spencer*, has aſſured me, there were vitriolick or alluminous Earth on the Banks of *Potomack*. And thus far of what my Memory ſupplies me, referring to the Earth; in the next place I ſhall give a ſhort Account of the Birds.

Of the BIRDS.

I Had indeed begun once whilſt I was in that Country to have made a Collection of the Birds, but falling ſick of the Griping of the Guts, ſome of them for want of care corrupted, which made them fling others away that I had thoroughly cured; for I was

paſt taking care of them my ſelf, there remaining but ſmall hopes of my Life.

There are three ſorts of Eagles, the largeſt I take to be that they call the grey Eagle, being much of the Colour of our Kite or Glead.

The ſecond is the bald Eagle, for the Body and part of the Neck being of a dark brown, the upper part of the Neck and Head is covered with a white ſort of Down, whereby it looks very bald, whence it is ſo named.

The third is the black Eagle, reſembling moſt the *Engliſh* Eagle, they build their Neſts much after the manner of that Dr. *Willoughby* deſcribes, and generally at the top of ſome tall old Tree, naked of Boughs and nigh the River-ſide, and the People fell the Tree generally when they take the young; they are moſt frequently ſitting on ſome tall Tree by the River-ſide, whence they may have a Proſpect up and down the River, as I ſuppoſe to obſerve the fiſhing-Hawks; for when they ſee the fiſhing-Hawk has ſtruck a Fiſh, immediately they take Wing, and 'tis ſometimes very pleaſant to behold the Flight; for when the fiſhing-Hawk perceives her ſelf purſued, ſhe will ſcream and make a terrible noiſe, till at length ſhe lets fall the Fiſh to make her own Eſcape, which the Eagle frequently catches before it reach the Earth or Water. Theſe Eagles kill young Lambs, Pigs, *&c.*

This fiſhing-Hawk is an abſolute Species of a Kings-fiſher, but full as large or larger than our Jay, much of the Colour and Shape

Shape of a Kings-fiſher, tho' not altogether ſo curiouſly feather'd; it has a large Crop as I remember; there is a little Kings-fiſher much the ſame in every reſpect with ours.

If I much miſtake not, I have ſeen both Goſs-Hawk, and Falcon; beſides there are ſeveral ſorts of the leſſer Kind of Stannels.

There is likewiſe the Kite and the Ring-tail.

I never heard the Cuckow there to my remembrance.

There's both a brown Owl and white Owl, much what as large as a Gooſe, which often kills their Hens and Poultry in the Night; the white Owl is a very delicate feathered Bird, all the Feathers upon her Breaſt and Back being Snow-white and tipp'd with a punctal of Jet-black: beſides there is a Barn Owl much like ours; and a little ſort of Scritch-Owl.

There's both the Raven and the Carrion-Crow; I do not remember I ever ſaw any Rooks there. Dr. *Moulin* and my ſelf, when we made our Anatomies together, when I was at *London*, we ſhewed to the *Royal Society*, that all flat-billed Birds that groped for their Meat, had three pair of Nerves, that came down into their Bills; whereby as we conceived they had that Accuracy to diſtinguiſh what was proper for Food, and what to be rejected by their Taſte when they did not ſee it; and as this was moſt evident in a Duck's Bill and Head, I draw'd a Cut thereof, and left it in your Cuſtody: A Duck has larger Nerves that come into their Bills than Geeſe or any other Bird that I have

ſeen and therefore quaver and grope out their Meat the moſt: But I had then diſcover'd none of theſe Nerves in Round-bill'd Birds: But ſince in my Anatomies in the Country, in a Rook I firſt obſerved two Nerves came down betwixt the Eyes into the upper Bill, but conſiderably ſmaller than any of the three pair of Nerves in the Bills of Ducks, but larger than the Nerves in any other round-bill'd Birds; and 'tis remarkable theſe Birds more than any other round-bill'd Birds ſeem to grope for their Meat in Cow-dung and the like: Since I have found in ſeveral round-bill'd Birds the like Nerves coming down betwixt the Eyes, but ſo very ſmall that had I not ſeen them firſt in a Rook I ſhould ſcarce have made the Diſcovery; in the lower Bill there are Nerves have much the ſame Situation with the flat-bill'd Birds, but very ſmall, and ſcarce diſcernable, unleſs to the Cautious and Curious.

The night Raven, which ſome call the *Virginia* Bat, is about the Bigneſs of a Cuckow, feathered like them but very ſhort, and ſhort Leg'd, not diſcernable when it flies, which is only in the Evening ſcudding like our Night Raven.

There's a great ſort of ravenous Bird that feeds upon Carrion, as big very nigh as an Eagle, which they call a Turky Buſtard, its Feathers are of a duſkiſh black, it has red Gills, reſembling thoſe of a Turky, whence it has its Name; it is nothing of the ſame ſort of Bird with our *Engliſh* Turky Buſtard, but is rather a Species of the Kites, for it will hover on the Wing ſomething like them,

them, and is carnivorous; the Fat thereof diſſolved into an Oil, is recommended mightily againſt old Aches and Sciatica Pains.

I think there are no Jackdaws, nor any Magpys; they there prize a Magpye as much as we do their red Bird.

The *Pica Glandaria*, or Jay, is much leſs than our *Engliſh* Jay, and of another Colour, for it's all blue where ours is brown, the Wings marbled as curiouſly as ours are, it has both the ſame Cry, and ſudden jetting Motion.

There are great Variety and Curioſity in the Wood-peckers, there's one as big as our Magpye, with blackiſh brown Feathers, and a large ſcarlet Tuft on the top of the Head: There are four or five ſorts of Wood-peckers more, variegated with green, yellow and red Heads, others ſpotted black and white, moſt lovely to behold. There's a Tradition amongſt them, that the Tongue of one of theſe Wood--peckers dryed will make the Teeth drop out if pick'd therewith, and cure the Tooth-ach (tho' I believe little of it, but look on it ridiculous) yet I thought fit to hint as much that others may try; for ſometimes ſuch old Stories refer to ſome peculiar Virtues, tho' not to all that is ſaid of them.

There be wild Turkies extream large; they talk of Turkies that have been kill'd, that have weigh'd betwixt 50 and 60 Pound weight; the largeſt that ever I ſaw, weigh'd ſomething better than 38 Pound; they have very long Legs, and will run prodigiouſly faſt. I remember not that ever I ſaw any of them on the Wing,

Wing, except it were once: Their Feathers are of a blackiſh ſhining Colour, that in the Sun ſhine like a Dove's Neck, very ſpecious.

Hens and Cocks are for the moſt part without Tails and Rumps; and as ſome have aſſured me our *Engliſh* Hens after ſome time being kept there have their Rumps rot off; which I'm the apter to believe, being all their Hens are certainly of *Engliſh* breed. I'm ſorry I made no anatomical Obſervations thereof; and Remarks about the Uſe of the Rumps in Birds, which at preſent I take to be a couple of Glands, containing a ſort of Juice for the varniſhing of the Feathers; having obſerved all Birds have much recourſe with their Bills to the Rumps when they dreſs their Plumes, whereby they ſcud thro' the Air more nimbly in their Flight.

Partridges there are much ſmaller than ours, and reſort in Covies as ours do; their Fleſh is very white, and much excels ours in my mind, *Sed de guſtibus non eſt diſputandum.*

Their Turtle-Doves are of a duſkiſh blue Colour, much leſs than our common Pigeon; the whole Train is longer much than the Tails of our Pigeons, the middle Feather being the longeſt. There is the ſtrangeſt Story of a vaſt Number of theſe Pigeons that came in a Flock a few Years before I came thither; They ſay they came thro' *New England*, *New York* and *Virginia*, and were ſo prodigious in Number as to darken the Sky for ſeveral Hours in the place over which they flew, and brake maſſie Boughs where they light; and many like things which I have had

aſſerted to me by many Eye-witneſſes of Credit, that to me it was without doubt, the Relators being very ſober Perſons, and all agreeing in a Story: Nothing of the like ever happen'd ſince, nor did I ever ſee paſt ten in a Flock together that I remember. I am not fond of ſuch Stories, and had ſuppreſſed the relating of it, but that I have heard the ſame from very many.

The Thruſh and Feldfare are much like ours, and are only ſeen in Winter there, accordingly as they are here.

Their mocking Birds may be compared to our ſinging Thruſhes, being much of the ſame Bigneſs; there are two ſorts, the grey and the red, the grey has Feathers much of the Colour of our grey Plovers with white in the Wings like a Magpye; this has the much ſofter Note, and will imitate, in its ſinging, the Notes of all Birds that it hears, and is accounted much the fineſt ſinging Bird in the World. Dr. *Moulin* and I made in our Anatomy many Obſervations of Singing-Birds to this effect: The Ears of Birds differ much from thoſe of Men and Beaſts, there's almoſt a direct Paſſage from one Ear to the other of Birds, ſo that prick but the ſmall Membrane call'd the Drum on either Ear, and Water poured in at one Ear will run out at the other: But this is not all, but what is much more remarkable, they have no Cochlea, but inſtead thereof there's a ſmall Cocleous or twiſting Paſſage that opens into a large Cavity that runs betwixt two Sculls, and paſſes all round the Head; the upper Scull is ſupported by many hundreds of ſmall

Thread-

Thred-like Pillars or Fibres, which as we ſuppoſed had another uſe alſo, to break the Sound from making any confuſed Eccho, and to make it one and diſtinct; this Paſſage we obſerved betwixt the two Skulls was much larger in ſinging Birds than in others that do not ſing, ſo very remarkable that any Perſon that has been but ſhew'd this may eaſily judge by the Head what Bird is a ſinging Bird, or has Aptitude thereto, tho' he never ſaw the Bird before, nor knew what Bird it were: This has often made me reflect how much the Modification of Voices depends upon the Accuracy of the Ear, and how deaf Perſons become dumb: and ſince I have obſerved that many Children, that have an acute Wit enough, that are ſlow of Speech, that is, long before they ſpeak, are much longer before they can pronounce thoſe Letters that are Sharps, as *g. b. r.* and never have an Aptitude to learn to ſing. Hence I judge that Songs that have many Sharps in them are the difficulteſt to ſing well, and diſcover any Perſons Skill upon the trial of Muſick moſt. This I ſuppoſe only, having no Skill in Muſick my ſelf, nor having ever diſcourſed any Perſon about it. As I remember we ſhewed ſome of theſe things to the *Royal Society*, and I drew ſome Cuts thereof, and gave the Doctor, upon Promiſe that he would put theſe and many other our joint Obſervations in Print, but I hear he is ſince dead. I have anatomized moſt ſorts of Creatures, and never found any four-footed Creature with an Ear like a Bird, unleſs a Mole; and a Mole has an Ear much like them, with a very thin double Scull, and a great Cavity like a Bird, and

is very acute of hearing; the Scull by reaſon of the large Cavity is very ſlender and eaſily cruſh'd, ſo that a Mole is quickly kill'd with a Bruiſe on the Scull like a Lark, and upon the Bruiſe the Membranes of the Scull turn black; whence *Segerus*'s Miſtake, *Membranæ Cerebri in ſuperficie exteriori omnino nigræ viſæ.* But when I have taken care not to bruiſe the Scull the Membranes were not black at all, both *Segerus* and *Severinus* I think had ſome perceptions of the different Structure of a Mole's Ear, but not any thing of its Analogy to a Bird's Ear; they ſpeak of a Bone *Egregie pumicoſum:* And *Segerus* ſays there's a *Ductus ad oſſis uſque petroſi cavitatem protenſus, plurimis fibrillis Membraneis annectabatur.* But to return, this mocking Bird having its Name from *Mimicking* all other Birds in ſinging, is a wonderful mettled Bird, bold and briſk, and yet ſeems to be of a very tender Conſtitution, neither ſinging in Winter, nor in the midſt of Summer, and with much Difficulty are any of them brought to live in *England.*

The red Mocking is of a duſkiſh red, or rather brown; it ſings very well, but has not ſo ſoft a Note as the gray mocking Bird.

Of *Virginia* Nightingale, or red Bird, there are two ſorts, the Cocks of both ſorts are of a pure Scarlet, the Hens of a duſkiſh Red; I diſtinguiſh them into two ſorts, for the one has a tufted Cops on the Head, the other is ſmooth-feather'd. I never ſaw a tufted Cock with a ſmooth-headed Hen, or on the contrary; they generally reſorting a Cock and Hen together, and play in a Thicket

of

et of Thorns or Bryars in the Winter, nigh to which the Boys ſet their Traps, and ſo catch them and ſell them to the Merchants for about ſix Pence apiece; by whom they are brought for *England*; they are ſomething leſs than a Thruſh.

There's a Bird very injurious to Corn, they call a Blackbird; I look on it a ſort of Starling, for they cry ſomething like them but do not ſing, are much what of the ſame bigneſs, have Fleſh blackiſh like theirs; they reſort in great Flocks together, they are as black as a Crow all over, their Bills and all, only ſome of them have ſcarlet Feathers in the Pinions of their Wings. *Quære*, whether a diſtinct Species?

They have a Lark nothing differing from our common Lark; they have another Bird which they call a Lark that is much larger, as big as a Starling; it has a ſoft Note, feeds on the Ground, and, as I remember, has the ſpecifical Character of a long Heel; it is more inclined to yellow, and has a large half Moon on its Breaſt of yellow; if it have not a long Heel, *Quære*, whether a Species of the Yellow-hammer?

They have a Martin very like, only larger than ours, that builds after the ſame manner. The honourable Col. *Bacon* has remarked for ſeveral Years, that they conſtantly come thither on the tenth of *March*, one or two of them appearing before, being ſeen hovering in the Air for a Day or two, then go away, and as he ſuppoſed, returned, with the great Flock. The Colonel delighted much in this Bird, and made like Pigeon-holes

at the end of his Houſe with Boards purpoſely for them.

Their Swallow differs but little from ours.

They have a Bird they call a Blue-bird, of a curious azure Colour about the bigneſs of a Chafinch.

There be other ſorts of Goldfinches variegated with orange and yellow Feathers, very ſpecious and beautiful.

Sparrows not much different from the *Engliſh*, but build not in the Eaves of Houſes that ever I ſaw.

The Snow-bird, which I take to be much the ſame with our Hedge-ſparrow; this is ſo called becauſe it ſeldom appears about Houſes but againſt Snow or very cold Weather.

The humming Bird that feeds upon the Honey of Flowers: I have been told by ſome Perſons, that they have kept of theſe humming Birds alive, and fed them with Water and Sugar: they are much the ſmalleſt of all Birds, have long Bills and curious coloured Feathers, but differ much in Colour.

Herons three or four ſeveral ſorts, one larger than the *Engliſh*, feathered much like a *Spaniſh* Gooſe.

Another ſort that only comes in Summer Milk white, with red Legs very lovely to behold.

The Bittern is there leſs than in *England*, and does not make that ſounding Noiſe that ever I heard.

Curlews ſomething leſs than our *Engliſh*, tho' bigger than a Wimbrel.

The Sandpiper much reſembling the *Engliſh*.

The Snipe, two ſorts, one reſembling ours, the other much leſs.

The

The Tewits are ſmaller than the *Engliſh*, and have no long Toppins, but juſt like a young one that begins to fly.

There are a great number of wild Swans.

Wild-geeſe and Brent-geeſe all winter in mighty Flocks, Wild-ducks innumerable, Teal, Wigeon, Sheldrakes, Virginia-didapers, the Black-diver, *&c.*

In my return home for *England May* 1686. off the Banks of *Newfound-land*, when we were, according to Account, a Hundred Leagues from the Shoar, we ſaw ſeveral prodigious floating Iſlands of the Ice, no leſs to our Wonder than Terror, for they were very dangerous: I got the Maſter to ſail one Day as nigh one of them as we ſecurely durſt, which we judged to be full a League in length, and was higher above Water than the top of our Main-maſt; the Snow drove to and fro upon it as upon a large Plane. There was a great Flock of ſmall Black-divers, that were not much bigger than a Feldfare, came to us a little before, but all of them then left and betook themſelves to this Iſland of *Ice*. They dived the conſtantlieſt, and the longeſt at a time of any Bird that ever I ſaw. We ſaw, as I remember, nigh thirty of theſe Iſlands of Ice. Captain *Rider* being ſome few Days later in his Paſſage, and bearing more to the *Nore*, told me, he ſaw many more of theſe Iſlands of Ice, and ſome much larger.

There are in *Virginia* a great many Cormorants; ſeveral ſorts of Gulls, and in about the Bay many Bannets. Thus much for the Birds, *Yours*, &c.

A Continuation of Mr. Clayton's *Account of* Virginia.

Of the Beaſts of Virginia.

THERE were neither Horſes, Bulls, Cows, Sheep, or Swine, in all the Country, before the coming of the *Engliſh*, as I have heard, and have much reaſon to believe. But now among the *Engliſh* Inhabitants there are good Store of Horſes, though they are very negligent and careleſs about the Breed: It is true there is a Law, that no Horſe ſhall be kept ſtoned under a certain ſize, but it is not put in Execution. Such as they are, there are good Store, and as cheap or cheaper than in *England*, worth about five Pounds apiece. They never ſhoe them, nor ſtable them in general; ſome few Gentlemen may be ſomething more curious, but it is very rare; yet they ride pretty ſharply, a Planter's Pace is a Proverb, which is a good ſharp hand-Gallop. The *Indians* have not yet learnt to ride, only the King of *Pomonkie* had got three or four Horſes for his own Saddle and an Attendant, which I think ſhould in no wiſe be indulged, for I look on the allowing them Horſes much more dangerous than even Guns and Powder.

Wild Bulls and *Cows* there are now in the uninhabited Parts, but ſuch only as have

been bred from ſome that have ſtrayed, and become wild, and have propagated their kind, and are difficult to be ſhot, having a great Acuteneſs of Smelling. The common rate of a Cow and Calf is 50*s.* ſight unſeen; be ſhe big or little, they are never very Curious to examine that Point.

Their *Sheep* are of a midling Size, pretty fine fleeced in general, and moſt Perſons of Eſtate begin to keep Flocks, which hitherto has not been much regarded, becauſe of the Wolves that deſtroy them; ſo that a piece of Mutton is a finer Treat than either Veniſon, Wild-gooſe, Duck, Widgeon, or Teal.

Elke, I have heard of them beyond the Inhabitants, and that there was one preſented to Sir *William Berkly*, which he ſome time kept.

Deer, there are abundance of brave red Deer, ſo that a good Woodſman, as they call them, will keep a Houſe with Veniſon; the *Indians*, they ſay, make artificial ſorts of Heads of Boughs of Trees, which they conſecrate to their Gods, and theſe they put on to deceive the Deer when they go a Shooting, or Hunting, as they call it, and by mimicking the Feeding of the Deer, they by degrees get within Shot.

Swine, they have now in great abundance, Shoats or Porkrels are their general Food; and I believe as good as any *Weſtphalia*, certainly far exceeding our *Engliſh*.

Rackoone, I take it to be a Species of a Monky, ſomething leſs than a Fox, gray-hair'd, its Feet formed like a Hand, and the Face too has likewiſe the reſemblance of a Monky's,

ky's, besides being kept tame they are very Apish: They are very prejudicial to their Poultrey, as I remember.

An *Opossum*, as big and something shaped like our Badgers, but of a lighter dun Colour, with a long Tail something like a Rat, but as thick as a Man's Thumb; the Skin of its Belly is very large, and folded so as to meet like a Purse, wherein they secure their Young whilst little and tender, which will as naturally run thither, as Chicken to a Hen; in these false Bellies they will carry their Young, they also feed on and devour Corn.

Hares, many will have them to be a Hedge-Rabbet, but I know not what they mean thereby. I take them to be a perfect Species of Hares, because I have seen Leverets there with the white Spot in the Head which the old ones have not, so it is in *England*; and the Down is perfectly of the Colour of our Hares, they sit as our Hares do, and make no Holes and Burrows in the Earth; true they are but about the bigness of an *English* Rabbet, and run no faster; they generally take into some hollow Tree within a little space, which then the People catch by gathering the withered Leaves, and setting them on fire within the hollow of the Tree, and smoaking of them so till they fall down. sometimes they take long Bryars, and twist them in the Down and Skin, and so pull them forth.

Squirrels, there are three sorts. The first is the great Fox Squirrel, much larger than the *English*, and gray, almost as a common Rabbet. These are very common, I have

eaten of them at the beſt Gentlemen's Tables, and they are as good as a Rabbet. The ſecond is the flying Squirrel, of a lighter dun Colour, and much leſs than the *Engliſh* Squirrel; the Skin on either ſide the Belly extended is very large betwixt the Fore-Leg and Hind-Leg, which helps them much in their ſkipping from one Bough to another, that they will leap farther than the Fox-Squirrel, though much leſs, yet this is ſtill rather ſkipping than flying, though the Diſtinction be well enough. The third is the Ground-Squirrel, I never ſaw any of this ſort, only I have been told of them, and have had them thus deſcribed to me, to be little bigger than a Mouſe finely ſpotted like a young Fawn; by what I further apprehended, they are an abſolute ſort of Dor-Mouſe, only different in Colour.

Muſk-Rats, in all things ſhaped like our Water-Rats, only ſomething larger, and is an abſolute Species of Water-Rats, only having a curious muſky Scent: I kept one for a certain time in a wooden Cheſt; two Days before it died it was extraordinary odoriferous, and ſcented the Room very much; but the Day that it died, and a Day after the Scent was very ſmall, yet afterwards the Skin was very fragrant; the Stones alſo ſmelt very well. They build Houſes as Beavers do, in the Marſhes and Swamps (as they there call them) by the Water-ſides, with two or three ways into them, and they are finely daubed within. I pulled one in pieces purpoſely to ſee the Contrivance: There were three different Lodging-Rooms, very neat, one high-

er than another, as I conceive purpoſely made for Retirement when the Water riſes higher than ordinary; they are conſiderably large, having much Traſh and Lumber to make their Houſes withal; I ſuppoſe they live moſtly on Fiſh.

Batts, as I remember at leaſt two ſorts; one a large ſort with long Ears, and particularly long ſtragling Hairs. The other much like the *Engliſh*, ſomething larger I think, very common.

I never heard of any *Lions*; they told me of a Creature killed whilſt I was there, in *Gloceſter* County, which I conceived to be a ſort of Pard or Tyger.

Bears there are, and yet but few in the inhabited part of *Virginia*; towards *Carolina* there are many more. There was a ſmall Bear killed within three Miles of *James City* the Year that I left the Country, but it was ſuppoſed to have ſtrayed, and ſwam over *James River*. They are not very fierce, their Fleſh is commended for a very rich ſort of Pork; but the lying Side of the Bear, as I remember, is but half the Value of the other, Weight for Weight.

There are ſeveral ſorts of *Wild-Cats* and *Poll-Cats*.

Beavers build their Houſes in like manner as the Muſk-Rats do, only much larger, and with pieces of Timber make Dams over Rivers; as I ſuppoſe either to preſerve their Furs dry in their Paſſage over the Rivers, otherwiſe to catch Fiſh by ſtanding to watch them thereon, and jumping upon them on a ſudden; they are very ſubtil Creatures, and

at the end of the Tail: Theſe Rattles ſeem like ſo many periſhed Joints, being a dry Huſk over certain Joints, and the common Opinion is, that there are as many Rattles or Joints, as the Snake is Years old. I kill'd four or five, and they had each eleven, twelve, or thirteen Joints; but the young Ones have no Rattles of a Year or two, but they may be known notwithſtanding, being very regular diced or checker'd, black and grey on the Backs. The Old ſhake and ſhiver theſe Rattles with wonderfull Nimbleneſs when they are any ways diſturbed; their Bite is very deadly, yet not always of the ſame Force, but more or leſs mortal, accordingly as the Snake is in Force or Vigour, and therefore in *June* or *July* much worſe, and more mortal, than in *March* and *April*. This Snake is a very majeſtick ſort of Creature, and will ſcarce meddle with any thing unleſs provok'd; but if any thing offend it, it makes directly at them. I was told a pleaſant Story of an old Gentleman, Col. *Cleyborn* as I remember was his Name, the ſame that ſent the Rattle-Snakes to the *Royal Society* ſome Years ſince. He had an odd Fancy of keeping ſome of theſe Snakes always in Barrels in the Houſe, and one time an *Indian* pretending to charm them ſo as to take them by the Neck in his Hand without biting of him; the old Gentleman cauſed a rattle-Snake to be brought forth; the *Indian* began his Charm with a little Wand, whiſking it round and round the rattle-Snake's Head, bringing it by degrees nigher and nigher, and at length flung the Switch away,

and

and whisked his Hand about in like manner, bringing his Hand nigher still and nigher, by taking less Circles, when the old Gentleman immediately hit the Snake with his Crutch, and the Snake snap'd the *Indian* by the Hand, and bit him very sharply betwixt the Fingers, which put his Charm to an end, and he roared out; but stretch'd his Arm out as high as he could, calling for a String, wherewith he bound his Arm as hard as possibly he could, and clapped a hot burning Coal thereon, and singed it stoutly, whereby he was cured, but looked pale a long while after. And I believe this truly one of the best ways in the World of curing the Bite either of Viper or mad Dog. I was with the honourable Esquire *Boyle*, when he made certain Experiments of curing the Bite of Vipers with certain *East-India* Snake-stones, that were sent him by King *James* the Second, the Queen, and some of the Nobility, purposely to have him try their Virtue and Efficacy: For that end he got some brisk Vipers, and made them bite the Thighs of certain Pullets, and the Breasts of others: He applied nothing to one of the Pullets, and it died within three Minutes and a half, as I remember; but I think they all recover'd to which he applied the Snake-stones, tho' they turned wonderful pale, their Combs, *&c.* immediately, and they became extream sick, and purged within half an Hour, and the next Morning all their Flesh was turned green to a wonder, nevertheless they recovered by degrees. The manner of the Application was only by laying on the Stone,

and

and by two croſs-Bits of a very ſticking *Diaculum* Plaiſter binding it on, which he let not lie on paſt an Hour or two, but I think not ſo long, took the Stone off, and put it into Milk for ſome time; ſome Stones were of much ſtronger Virtue than others. I propoſed a piece of unquench'd Lime-ſtone to be apply'd to ſee whether it might not prove as powerful, but know not whether ever it was tried. But here one telling Mr. *Boyle* the Story of this *Indian*, he approved the method of Cure, and ſaid, an actual Cautery was the moſt certain Cure. The Poiſon, both of Viper and mad-Dog (as I conceive) kill by thickning of the Blood, after the manner that Runnet congeals Milk when they make Cheeſe. Vipers, and all the viperous Brood, as rattle-Snakes, *&c.* that are deadly, have I believe their poiſonous Teeth fiſtulous, for ſo I have obſerved that Vipers Teeth are, and the rattle-Snakes very remarkable, and therefore they kill ſo very ſpeedily by injecting the Poiſon through thoſe fiſtulous Teeth into the very Maſs of Blood; but the bite of mad-Dogs is oft of long Continuance before it get into and corrupt the Maſs of Blood, being it ſticks only to the outſides of the Teeth, and therefore when they bite thro' any thickneſs of Cloaths, it rarely proves mortal, the Cloaths wiping the Poiſon off before it come to the Fleſh. A Girl that was bit about *New-Years Day*, continued well till *Whitſuntide*, when coming to ſee certain Friends in our parts, ſhe fell very ill, and being a poor Girl, they came to me; it pleaſed God I recovered her. Sometime af-

after ſhe returned to give me thanks for ſaving her Life, being two Perſons that were bit with the ſame Dog, were dead, whilſt ſhe remained under Cure, and therefore ſhe was the fullier convinc'd ſhe owed her Life to me; but of this I ſhall give a more particular Inſtance by and by. But the Poiſons of Vipers ſeem to be like the injecting of Liquors into the Veins of Creatures; Dr. *Moulin* and I made many Experiments of this Nature together, and I have made many more by my ſelf. We once, I remember, injected half a Dram of Allom into the jugular-Vein of a Dog before the *Royal Society*, (the Allom being only diſſolved in a little Water) which within ſomething leſs than one Minute's time was ſo abſolutely dead, as not to have the leaſt convulſive Motion; and I have done the like with many other things beſides Allom, but with ſome things it is more curdled and broken, than with others; and will differ much both as to colour and conſiſtence. Salt-Petre kills much as quickly as Allom, but then the Blood in the Heart looks very florid, ſmooth, and even. I wiſh ſome Perſon of Obſervation and Leiſure would proſecute theſe ſorts of Experiments, and make Injections of the ſeveral things moſt uſed in Phyſick into the Veins of Creatures, both in Quantities, and into different Veins, as into the thigh-Veins of ſome Dogs, and Jugulars of ſome others, and in much leſſer Quantities of ſuch things as kill ſuddenly; for in the little time I have ſpent in theſe ſort of Experiments, I eaſily perceive notable Diſcoveries might be made thereby: One Dog that

lived

lived became lame and gouty; another with Quick-Silver died in about ſixteen Weeks time, conſumptive, and I diſcovered Quick-Silver in the impoſtumated parts of his Lungs. *Query*, Whether ſome Perſons that have been flux'd, or uſed Quick-Silver Ointments, and the like, and afterwards become conſumptive, owe not their Diſtemper to the abuſive uſe of a moſt excellent Remedy? Much after the ſame manner, the ſubtile Quick-Silver getting into the Maſs of Blood by degrees, through its Ponderoſity ſettles in the Lobes of the Lungs, and cauſes Ulcers there. But to return: The Poiſon of Vipers and mad Dogs I ſuppoſe kill by thickning of the Blood, as many malignant Fevers alſo do; in all which Caſes, I look on volatile Salts to be the propereſt Phyſick, as keeping the Blood from congealing. I had a ſingular Inſtance hereof in a Gentleman of *Yorkſhire*, bit with a Grey-hound on the *Thurſday*, not three Minutes before the Dog died mad; he bit him in ſeveral places of the Hands, as he was giving him a Remedy: The *Monday* following the Gentleman was very ill, and came to our Town to an Apothecary his Acquaintance, who knowing not what to do, deſired my Aſſiſtance. When I came, the Gentleman could talk, but every two or three Minutes he had violent Fits, and would tell us when they were over, that his Brains worked like Birm in an Ale-Fat, and ſeemed to froth up at every Fit. The Apothecary had no volatile Salt of Vipers; ſo I took the volatile Salt of Amber, and ordered him ten Grains in Treacle-Water

every

every half Hour: He told me every Doſe ſeemed to clear his Brain, and cool it as perfectly as if a Baſon of cold Water were poured on his Head, but it returned by degrees again: Having then a volatile Salt by me that vomits very well, I gave him a Doſe thereof; it worked very well, and he was much better after it: I then ordered him to continue the volatile Salt of Amber once every four Hours, and at each two Hours end, that is betwixt, *Spec. Pleres Archonticon* and *Rue powder'd ana gr.* 15. whereby he was ſo well recovered, that within two Days he would needs go home, to look after ſome urgent Affairs, and afterwards found himſelf ſo well, that he forgot to return, and perfect the Courſe; and I heard no more of him for half a Year, when I was fetched one Morning to him in great haſte. He had been abroad, play'd the good-Fellow, and in his return home having rode a great Day's Journey, being weary, and I ſuppoſe finding himſelf indiſpoſed, he ſtaid all Night in our Town, it being fortunately in his way. In the Morning when he ſhould have got up, he could not ſtand, whereupon the Apothecary was ſent for, and a Surgeon to bleed him, which was accordingly done, but he grew worſe; for in this Caſe I look upon bleeding to be very prejudicial, as well as in moſt malignant Fevers, for thereby the Spirits are diminiſhed, and the Blood congealed the ſooner. When they had done all they could, and the Symptoms ſtill increaſed, they at length ſent for me. I never ſaw Man or Creature in that Agony in all my Life, that I found him in,

Senſe-

ſenſeleſs, and mad, when at beſt, but every Minute the fierceſt ſhiverings ran through him, his Eyes would firſt roll and then ſet, as if ready to ſtart out of his Head, but above all, the Swelling and Luctation at his Breaſt, was as if he would burſt, which went off with a prodigious ſigh: All this I judge the effects of the Heart labouring to diſcharge it ſelf of the ſtagnating Blood, and the Nervous Convulſions as Conſequences thereof. And I am the more confirm'd in this, from what I ſaw in a Woman that was bit alſo with a mad-Dog in the Leg, and fell ill the very day that ſhe had paid the Chirurgeon for her Cure; and notwithſtanding all that could be done, growing worſe, they ſent for me; I went, and found her with what is called a *Hydrophobia*; She would look earneſtly after Drink or Water, and ſeem to deſire it, but as ſoon as ſhe began to drink, away it went, be it what it would, with the greateſt Violence ſhe could poſſibly fling it. I gave her the Vomit hereafter and alſo before mentioned, but ſhe got but little of it down, and I had no more with me; nevertheleſs it ſo brought her to her ſelf, that ſhe could anſwer Queſtions, and I aſked her, whether ſhe was afraid of the Drink and Water, when ſhe flung the Cups in that violent manner from her? She ſaid no; but when ſhe offered to drink, her Breaſt and Heart would not let her. I aſked whether through any Averſion or Fear? She ſaid no, ſhe was very thirſty; but when ſhe offered to drink, it ſtruck to her Heart, and ſtopped her Breath. That is, as I apprehend, the cold Drink paſſing down the Throat

ſtruck

ſtruck a Chilneſs in the Blood, and made it readier to ſtagnate: Beſides the very Act of Drinking, hindring the free Breathing, conduced alſo much thereto; and therefore the Heart was ſo ſuddenly oppreſs'd, that ſhe could not forbear flinging away whatever ſhe had in her hand. She complained alſo of a great Rigor and Stiffneſs or Straitneſs of the Muſcles of her Breaſt; ſo that poſſibly the ſpirituous Liquor that flows in the *Genus Nervoſum* may be congeal'd as well as the Blood; or the ſame effects may be ſuppoſed notwithſtanding to be the reſult of the condenſed Blood clogging both the Heart and Lungs, ſo that the Breaſt may ſeem to be ſtraitned therewith. The ſame I judge to be the cauſe of all the violent Luxations in this Gentleman, whoſe Fingers I looked on, and found the Places where he had formerly been bit turned blackiſh, and much inflamed about them, which confirmed me in my Sentiment, that it was a Relapſe of its former Diſtemper, that is, of the Bite of the mad-Dog. I told them, if any thing in the World would ſave his Life, I judged it might be the former Vomit of volatile Salts; they could not tell what to do, nevertheleſs ſuch is the Malignancy of the World, that as ſoon as it was given, they ran away and left me, ſaying, he was now certainly a dead Man, to have a Vomit given in that Condition. Nevertheleſs it pleaſed God that he ſhortly after cried, *this Fellow in the Black has done me good*, and after the firſt Vomit, came ſo to himſelf, as to know us all. I vomited him every other day with this Vomit for three times,

and

and made him in the interim to take volatile Salt of Amber, and the aforeſaid Powders, and to waſh his Hands, and Sores in a ſtrong ſalt Brine: to drink Poſſet-Drink with Sage and Rue, and by this Courſe, and the Bleſſing of God, his Life was ſaved, and he perfectly cured, for it was now four Years ſince, and he had had no Relapſe. I have cured ſeveral others by the ſame Method. Coll. *Spencer*, the Secretary of State in *Virginia*, a very ſerious and ingenious Gentleman, told me that his Servant brought him word once that a Sow having farrow'd, a rattle-Snake was got into the Den, and had killed the Piggs. The Colonel went to ſee the Snake, which they ſaid was ſtill coyl'd in the Den; there followed them two or three mungrel Curs, and they ſat one of the Dogs at the Snake, which was too quick for the Dog, and ſnapt him by the Noſe, whereupon he ſet a howling, and run immediately into the adjacent River, and died very ſhortly after. Another of the Dogs upon the like Attempt was bit by the Snake alſo, and fell a howling, and frothing, and tumbling; but being he dyed not ſo ſoon as the other Dog did, they fetched ſome of the Herb which they call Dittany, as having a great traditionary Virtue for the Cure of Poiſons; they pounded it, and adding a little Water, expreſs'd the Juice, and gave the Dog frequently thereof, nevertheleſs he dyed within a Day or two. The howling of the Dogs he ſuppoſed gave notice to the Sow, and made her come furiouſly briſling, and run immediately into her Den; but being likewiſe bit by the Snake, ſhe ſet up a terrible

terrible Squeak, and ran alſo into the River, and there died.

A Gentlewoman, that was a notable female Doctreſs, told me, that a Neighbour being bit by a Rattle-Snake, ſwelled exceſſively; ſome Days afterwards ſhe was ſent for, who found him ſwelled beyond what ſhe thought it had been poſſible for the Skin to contain, and very thirſty. She gave him *oriental Bezoar* ſhaved, with a ſtrong Decoction of the aforeſaid Dittany, whereby ſhe recovered the Perſon: To the beſt of my Remembrance, it was he that told me, aſking him afterwards, what he felt when the Snake firſt bit him? He ſaid, it ſeemed as if a flaſh of Fire had ran through his Veins.

Beſides the Rattle-Snake there is the Blowing-Snake, an abſolute Species of a Viper, but larger than any that I have ſeen in *Europe*; it is ſo called, becauſe it ſeems to blow, and ſpread its Head, and ſwell very much before it bite which is very deadly. It is remarkable that there is none of their Snakes there, make any of that hiſſing Noiſe that ours in *England* make, but only ſhoot out their Tongues, ſhaking them as ours do, without any Noiſe at all; this is a ſhort thick ſort of Snake, there is another ſort of deadly Snake, called the *Red-Snake*; I once narrowly eſcaped treading on the Back of one of them: They are of an ugly dark brown Colour, inclining to red; their Bellies are of a more duſky White, with a large ſtreak of vermilion Red on either Side; this too is of the Viper kind, but is not ſo ſhort, but its Tail is more taper and ſmall. The *Horn-Snake* is, as they

ſay, another ſort of deadly Snake; I never ſaw any of them, unleſs once, ſhortly after my Arrival in that Country, which I cannot atteſt to be the Horn-Snake, for I could not diſtinctly view it, being in a Thicket of *Sumach*; it was perch'd up about two Foot high in a *Sumach* Branch, its Tail twiſted about the Shrub, and about a quarter of a Yard ſtood bolt forward, leaning over the forked Branch thereof: I could not ſee the Horne, which they ſay it has in its Front, wherewith it ſtrikes, and if it wounds, is as deadly as the Rattle-Snake's Bite. The Gentleman that was with me, told me it was the Horn-Snake; but being in haſt, and on Horſeback, and the Snake in a Thicket, I could not ſee the Horn; but had I thought I ſhould never have ſeen more of them, I ſhould have took a little Pains to have been better ſatisfied. This I think may not improperly be referred to the *Dart-Snake*.

The *Black-Snake*, is the largeſt I think of all others, but I am ſure the moſt common; I have kill'd ſeveral of them full ſix Foot long, their Bite is not deem'd mortal, but it ſwells, and turns to a running Sore; they feed upon Lizards, Mice, Rats, Frogs, and Toads, which I have taken out of their Bellies. I was once a Simpling in the Woods, on a fair Sun-ſhine Day, when I ſaw a Snake crawling on a Tree that was fallen, and licking with its forked Tongue as it moved; I ſtood ſtill to obſerve it, I ſaw it lick up ſmall Inſects and Flies with wonderful Nimbleneſs, catching them betwixt the Forks of its Tongue.

The

The *Corn-Snake*, moſt like the Rattle-Snake of all others in Colour, but the Checker are not ſo regular, neither has it any Rattles: They are moſt frequent in the Corn-Fields, and thence I ſuppoſe ſo called; the Bite is not ſo venomous as the Black Snakes.

The *Water-Snake*, a ſmall Snake, I never ſaw any of them above a Yard long, though I have ſometimes ſeen Forty or Fifty at once; they are of an ugly dark blackiſh Colour: They ſay, they are the leaſt venomous of any.

Part of two Letters from Mr. J. Hillier, *dated* Cape Corſe, Jan. 3. 168⅞. *And* Apr. 25. 1688. *Wrote to the Reverend Dr.* Bathurſt, *Preſident of* Trinity College, Oxon; *giving an Account of the Cuſtoms of the Inhabitants, the Air,* &c. *of that Place, together with an Account of the Weather there from* Nov. 24. 1686. *to the ſame Day* 1687.

Cape Corſe, Jan. 3. 168⅞.

I Thought the Cuſtom of deſtroying Slaves at the death of great People had been aboliſh'd, and I was ſo inform'd; but we have ſeen that it is not; for *Oct.* 3. this Year, died *Aben Penin Aſhrive*, King of *Feton*, here at *Cape Corſe*, where he had been long ſick; the Fetiſhers had done all they could to ſave his Life, which was nothing at all to the purpoſe; their Phyſick ſcarce extends to any thing but the Flux, and what we call the French Diſeaſe; his was a Conſumption and an Aſthma

(if I miſtake not the Word) of a great Continuance: So they fled to the Aid of their Religion, and according, it ſeems, to the Rules of that, they made ſeveral Pellets of Clay, which they ſet in his Room, in Rank and File, all ſprinkled with Blood; Beſides the ſeveral Muttons which they eat to his good Health. But that was of too little Force; ſo the Man died, having delivered his Sword to the *Dy*, who in the *Interregnum* was to be the principal Man, for the Kingdom is Elective, contrary to what we wrote before, and commanding him to be conſtant to the *Engliſh*, of whom himſelf had been a great Favourer, with a Threat, if he was not, of haunting him after his Death; he alſo appointed one of his Wives, whom he thought worthy of an unlucky Honour, to accompany him to the other World; the next Day he was carried to *Feton*, and buried there, *Nov.* 2. with the poor Woman we ſpoke of. Preſently after, they that were conſiderable, or had a Mind to ſeem ſo, ſent in them that they had a mind to murther in Honour of the King: how many there were 'tis hard to ſay, the higheſt account gives 90, the loweſt 50, the middle 70; the Blacks do not underſtand Arithmetick, ſo the Numbers they give in all caſes are very uncertain. I think there were about eight from this Town, which will not hold Proportion to the higheſt Rate; but 'tis like near *Feton* there might be more. They ſay alſo, that many more will follow at half a Year's Diſtance from his Death. The manner of the Execution of theſe poor Creatures I have not yet learnt, only that they

make them drink and dance, with a great deal of Bravery all the beginning of the Day, and towards Night cut off their Heads, but whether by that they mean the common way of their Executions I am yet to ſeek.

After the King's Funeral, the next thing was to chuſe a Succeſſor; ſo the People were called together at *Feton*, (I ſuppoſe by the Authority of the *Dy*) without inquiring any thing of their Freehold; they pitch'd upon Mr. *Dy*, though he was not of the Blood-Royal; the Reaſon was, as they ſaid, becauſe he had Power enough to do what he pleas'd, and they could do nothing againſt him; but he refuſed the Honour becauſe of the Charge 'twould put him to, and propos'd the Brother of the deceaſed King: So the Buſineſs ſtuck ſome time, but at laſt 'twas accorded, and he [King *Aſhrive*'s Brother] declared King, *Nov.* 18. his Name is *Abenaco*.

'Tis a Wonder how they could diſpatch ſuch a Buſineſs, with ſo little Diſturbance; but I ſuppoſe there was no conſiderable Number that diſſented; otherwiſe it would ſcarce have been determined without Blood-ſhed; for it would ſcarce have been poſſible for them to have taken any Poll.

I ſaid it was a doubt whether theſe Sacrifices died after the rate of their ordinary Executions; if you would know that, thus it is, the Creature that is condemn'd, is made to drink abundance of Palm-Wine, and to dance, every Body that will, in the mean time, ſtriking or puſhing him, when that is over, as is ſaid, he is thrown down, his Face into the Sand, which whether it ſtifle him or not, I

can't tell, then his Legs are cut off below the Knees, and his Arms below the Elbow, afterward his Thigh and his Arms below the Shoulder, laſtly his Head.

A Man would not expect any thing more barbarous than this; yet there is a Cuſtom which has ſomething worſe; when any one has new Drums or Trumpets, 'tis neceſſary that they be conſecrated with humane Blood: I have known but one happen of this Kind, that was *Jan.* 7, 168$\frac{6}{7}$. when after the Man had been executed after the former Rate about eight in the Morning, at one in the Afternoon they drank Palm-Wine out of the upper part of his Skull, and this in the ſight of all the Factors at *Cape Corſe*.

I remember for the Unhealthineſs of the Place, you propoſed to enquire if it were woody, and if any good might be done to it by cutting down the Woods, as has happen'd in mnay *American* Plantations; of that Matter this is what I can ſay.

The Shore lies almoſt Eaſt and Weſt, expos'd to the Sea wholly upon the South, the Country is hilly, the Hills not very high, but thick, cluſtering together, the Valleys between extream narrow, the whole in a manner covered with certain Shrubs, low, but very thick; what the People till, comes not to above a tenth part of their Ground; and where they do till, it hinders not that within half a Year the Ground is over-grown as before, for they do not root up the Shrubs, but only cut, or ſometimes burn them ſomewhat cloſe to the Earth, ſo they ſpring again in a very little Time; this is ſufficient for

their planting the Corn, which they do by making little Holes in the Earth at a competent Diſtance, and putting Seeds into them.

It may be that if thoſe Shrubs were deſtroyed, the matter might be mended, which yet is not to be hoped for, but by bringing the People to ſome kind of Induſtry, and that will not be eaſie; they are ſo wholly given to lazineſs, and ſo intirely bred up in it, that there muſt be the greateſt Change imaginable, before they become any whit tolerable; a Man may ſee their Temper by this, that though their Tillage be very eaſie, and the Earth yields many Hundreds for One, yet ſo little is the uſe they make of it, that one ſcarce Year brings them to danger of ſtarving; and though there be People enough, and every Man has Power of chooſing what he will, that is not already till'd by ſome other, yet not the tenth Part, as we have ſaid, is employed: So that a Man would wonder what came in the French man's Head to fancy them induſtrious; but ſubtile they are, and diligent to cheat any Man that is not cautious enough to avoid it.

So that the Fault of the Wood is (by the lazineſs of the People) without any Remedy. But there may be ſomething in the Earth it ſelf; the Water which they have here in Pits (rain Water for the moſt part, but yet ſtrain'd through the Earth) has a kind of taſte mixt of ſweet and ſubacid, if I underſtand what I ſay; I am told 'tis of Vitriol, whether that be miſchievous, you know better than I do.

But

But I take this for certain, ſince I have had it from good Hands, that at *Widdah*, which is one of the moſt unhealthy Places in *Guiney*, but 'tis not upon the Gold-Coaſt, he that opens the Ground, though it be but to dig a Grave, runs the Hazard of his Life: So miſchievous are the Steams from thence ariſing. It's poſſible there may be ſome ſuch Steams here, only not ſo violent; though in *England*, I think, a Gravel or Sand (which here are always uppermoſt for as much as I have ſeen) are eſteemed very wholſome Soils; under them is a kind of whitiſh Marl almoſt like Fullers-Earth.

For the Air, except what I have ſaid before, I do not know what Fault it has; 'tis extreme hot, 'tis alſo ſubtile and piercing, and I believe enters a Man's Body eaſier than that in *England*. It has been clearer than that uſes to be one Day with another, even this laſt Year, which has been the wetteſt and moſt cloudy which has happened a long Time; I think to give you an Account of the Weather in it as ſoon as I have time to tranſcribe.

For the Age of the Inhabitants, 'tis very uncertain, becauſe none of them keep an Account of it; there are ſome of them very Grey, but if the Country be to them unhealthy, grey Hairs may come early: I think there be many more Funerals here than at *Oxford*, though that be a much larger Place, eſpecially in the Rain-Times, which to us are always healthful.

I think not much of the Mortality (not all) that happens among Strangers, is the Effect of their ill Diet, and ill Government

of

of themſelves; for they eat but little, having neither Stomach nor Money to buy what they want: but they drink exceſſively, being for that more readily truſted, and of Liquors very hot and ſpirituous; and if any chuſe the cold rather, his Stomach is chil'd and he is in danger of a Flux or an extream Looſeneſs, and that immediately.

There is another thing, Men guard themſelves leſs from the Air than in any other Places, truſting to the heat of the Climate, and receive the cool of the Evening with only a Shirt. Now I think that the Air, tho' not ſo cold, is much more ſubtile and piercing here, than in our Country; it corrodes Iron much more, not by the Moiſture, for it is not ſo moiſt, and beſides it does it in the dry Weather too. Perhaps there are ſome other Effects to evidence the ſame thing; beſides that, the Diet which moſt Men procure, is not extraordinary, and the paſſing by Canoes from one Place to another has a Danger in it beſide that of the Sea.

Cape Corſe, Apr. 25. 1688.

I promiſed in my laſt to give you an Account of the Weather at *Cape Corſe* for the laſt Year, which Account I have incloſed in this; it is as exact as I could give; 'tis a thing which has been very little obſerved, whether it deſerves to be more, I do not know. That Year has had the moſt Rain of any that can be here remembred; yet the Mortality was much leſs than the Year's before; ſo that perhaps wet is not that which makes the Country unhealthy; though we had

had very many ſick, eſpecially in *June* and *July*, whoſe Diſeaſes were not mortal.

If you give your ſelf the Trouble to read the incloſed, you will find often mention of a Tornada, which is a violent Storm of Wind, follow'd commonly by Rain, but not always; the Wind ceaſes not preſently upon the Rain, but after ſometime it does: In this Place it comes (as does an Hermitan) moſt frequently from the North, taking in the next Points, whether to the Eaſt or Weſt, but chiefly the Eaſt, though I have ſeen both that and an Hermitan from other Points; ſo the Account is not without Exception; there are in ſhort, uncertain Blaſts from all Quarters, which I believe reach not many Yards, but the general Wind (for ought that I ſee) is not ſo inconſtant; Veſſels that go to Windward are helped by them, when they are not over ſtrong, for they are oppoſite to the Sea-Breeze, and they can ſteer by them a regular Courſe; which ſure they could not do, if they were very irregular. They never fail to give Warning beforehand, though ſometimes after that Warning they do not follow; there is a very black Cloud appears afar, in which if there be a kind of white Spot, the Wind will be moſt, if not, the Rain; this the Sailors ſay. Sometimes there is that Mark, ſometimes not, though I doubt the Prediction from it is not very certain; as neither are any perhaps of that kind.

An Account of the Weather at Cape Corſe *in* Guiney, *from Nov.* 24. 1686. *to the ſame Day,* 1687.

Lat. N. 4*d.* 49*m.* *Nov.* 1686.

24. AND 25. clear and hot.

26. About 2. *a. m.* a Storm of Rain with Thunder for ½ Hour.

27. At the ſame Hour, Rain which laſted ſomewhat longer.

28. About 5. *a. m.* ſome Rain, afterward Miſty, about 10. extreme hot.

29. About 2. *a. m.* a great Storm of Rain, ſlacking often but renewing again, it laſted about an Hour; the Day after clear.

December, 1686.

Thence to *Dec.* 7. clear; then cloudy in the Morning; between 12. and 1. *p. m.* a Shower laſting about ½ Hour. Thence clear and hot.

10. A little Miſt in the Morning, otherwiſe very clear and hot; ſo till 15.

15. And ſome Days after ſomewhat thick, eſpecially in the Morning.

19. And 20. We had a dry North, and North-Eaſterly Wind, called an Hermitan, and it overcame the Sea-Breeze; found very ill for the Eyes, and moſt Men complained of a feveriſh Temper; it was parching, but rather colder than ordinary.

21. It ceaſed; a clear Air and very hot.

23. We had the Hermitan again; but the Morrow it ceaſed; then and

25. Some Clouds but no Rain.

Thence

Thence to 29. clear and hot; 29. the Hermitan returned, but did not continue.

Thence Clouds ſometimes, but no Rain till *Jan.* 2.

This Month we had three Funerals, one being ſick of the Flux laid violent Hands upon himſelf, through Impatience of the Pain, the 3d Day.

The ſecond upon the 25th died convulſively, not having been ſick above one Day.

The third, *Dec.* 27. died of a Dropſy, which had ſucceeded a tedious Flux.

January, 178$\frac{6}{7}$.

2. About 5. *a. m.* Rain for $\frac{1}{2}$ Hour between 7. and 9. an Hour; from $\frac{1}{2}$ Hour paſt 9. to 1. *p. m.* the reſt cloudy.

5. At 2. *a. m.* about $\frac{1}{2}$ Hour.

8. At 1. in the Morning about an Hour, the Days between ſomewhat cloudy. Thence to 12. extreme hot.

12. And 14. ſomewhat cloudy otherwiſe the Heat continued,

17. At 7. *p. m.* a Tornada for above $\frac{1}{2}$ Hour, and about 12. at Night another; but the Heat very little abated.

22. between 5. and 6. *p. m.* began a Tornada, which laſted above an Hour very violent, with great Claps of Thunder and Lightning. Tank filled 1. Foot.

23. In the Morning a great Miſt, after 8. clear and extreme hot.

The latter end of *January*, and the beginning of *February* commonly miſty in the Morning; after extreame hot.

I find no Funeral this Month. *Febru-*

February, $168\frac{6}{7}$.

Beginning of *February*, as before.

10. Somewhat cloudy and cool, till then we were troubled with Coughs, for the moſt part; about this time they ceaſed.

So the 11th, toward Night, Thunder afar off, and expectation of a Tornada: *But it* fail'd.

12. Extream hot.

13. A ſtronger Wind than ordinary from Sea-ward.

14. Something like an Hermitan, but not from its uſual Quarter. Clear and hot till about 2. *p. m.* then cloudy, but no Rain.

Thence to 22. extream hot and clear.

From 22. to *March* 1. ſome flying Clouds without Rain, ſultry hot and unwholeſom.

24. Some ſhew of a Tornada, but it paſt away.

This Month we had two Funerals, but their Diſeaſes I find not.

March, $168\frac{4}{7}$.

The beginning of *March* as the latter end of *February*.

5. From 6. *a. m.* for an Hour and $\frac{1}{2}$. a violent Tornada; the Day after cloudy. 6. clear.

7. At Night Lightning and Clouds afar off; but nothing followed.

Thence to 11. clear and hot.

11. About 5. *a. m.* a violent Rain for almoſt $\frac{1}{2}$ Hour.

12. And 13. cloudy.

14.

14. about 4. *a. m.* a gentle Shower but laſted not long,

15. between 6. and 7. *a. m.* a few Drops, and likelyhood of more, but nothing followed; both Days cloudy.

16. Extream hot.

17. Somewhat cloudy.

Thence to 20. extream hot.

20. Cloudy; about 10. *a. m.* ſome few Drops.

21. Very hot.

22. In the Morning hot; about 12. a violent Rain for a quarter of an Hour.

23. Clear.

24. About 2. *a. m.* Rain for about ½ Hour; the Day after clear.

Thence to *April* 3. clear and extream hot.

No Funeral.

April, 1687.

3. At 3. *p. m.* a violent Tornada, but only ſome few Drops of Rain; at 5. *p. m.* a little more Rain.

4. Cloudy by fits, otherwiſe very hot.

5. Hot and clear.

6. In the Morning hot, about 2. *p. m.* cloudy; about 3. ſome Drops of Rain, in the Evening the Clouds diſperſed.

7. Clear and hot.

8. Between 12. and 1. in the Morning, a violent Rain for near an Hour; after 2. one ſomewhat longer; the Day after there appeared to have been much Rain; Tank filled two Foot and ſomewhat more.

9. About 7. *a. m.* ſome Drops, cloudy all Day.

10.

10. Cloudy about 11. *a. m* a ſmall Miſt.

11. Preſently after Midnight it began to rain and laſted till 6. *a. m.* a great part of the Time very violently, it began with a ſtrong Tornada; Tank above three Feet. The Day after ſome Clouds otherwiſe extreme hot.

So alſo 12, and 13.

14. About 5. *a. m.* a Shower for ½ Hour, between 6. and 7. *p. m.* another of the ſame continuance, the Day between extreme hot.

So 15. 16. a Shower for ½ Hour, it began with a violent Tornada, the Rain not much, afterward cloudy.

17. and 18. Clear.

19. Clear alſo, about 7. *p. m.* a conſiderable Wind but ſome Drops of Rain.

20. Clear but windy.

21. Between 12. and 2. moderate Rain for near an Hour.

22. About 2. *a. m.* moderate Rain almoſt an Hour; at 11. *p. m.* a ſhort Shower and gentle: the Day between extreme hot.

23. Cloudy about 10. *a. m.* ſome Drops.

24. Extreme hot.

25. About 1. *a. m.* Rain for near an Hour; the Morning after hot; Afternoon cloudy; moſt part of the Night, Thunder and Lightning, but no Rain.

26. At 7. *a. m.* ſtrong Rain for ½ Hour, after that a little Miſt; Afternoon, from 12. to 5. it rained unequally, but the moſt part moderate.

27. Extreme hot.

28. About 12. ſomewhat cloudy, at 3. *p. m.* it began to rain, and laſted about an Hour and ½; after cloudy and ſome Drops; in the Night a Shower or two. 29.

29. Cloudy. Thence to *May* 6. sometimes cloudy; but for the most part violent hot.

This month we had three Funerals; one the third of a Fever, another on the 19th of I know not what Pains in the Guts, another 24. of the Flux.

The 15th and some Days following, there settled upon the Castle Walls, certain Swarms of wing'd Ants, a little bigger than Bees; they would bite very severely, and were blown up with Powder.

May, 1687.

Till the sixth as before.

6. In the Morning cloudy, a little after Noon some Wind, followed by gentle Rain which lasted till 3. *p. m.* after cloudy.

7. Hot. 8. cloudy about 10. *a. m.* a gentle Shower for $\frac{1}{4}$ Hour; about 8. *p. m.* a very violent Storm of Wind and Rain, but it quickly grew moderate, and lasted in all not above $\frac{1}{2}$ Hour. 9. clear.

10. About Noon a violent Shower for $\frac{1}{2}$ of an Hour; after 8. *p. m.* another as long, but not so violent; past 9. another shorter.

11. Clear. 12. Clear, past 9. *p. m.* a very violent Tornada with Rain, which lasted somewhat more than 2 Hours.

13. Between 12, and 1. in the Night, a short Shower; about 9. *a. m.* some Drops; so also in the Afternoon but nothing considerable; cloudy all Day.

14. Cloudy; at 9. *a. m.* a violent Rain for $\frac{1}{4}$; after gentle for above an Hour; about 3. *p. m.* some Drops.

15. About 3. *a. m.* Rain for ½ Hour; between 4, and 5. another; after foggy and cloudy with ſome few Drops; about 7. *p. m.* a violent Tornada with Rain for near an Hour.

16. About 4. *a. m.* Rain for an Hour; after 8. for ¼ Hour; after 6. *p. m.* Rain and Wind, but both moderate, for ½ Hour; paſt 1. about as much.

17. About 4. *a. m.* a ſhort Shower, after clear; 18. clear.

19. Cloudy, about 10. *a. m.* ſome Drops.

20. Cloudy, between 8. and 10. *a. m.* a Shower; firſt violent, after more moderate, till it ended in a kind of Miſt; it laſted in all about 1 ½ Hour; the Day after clear, 21, and 22. clear.

23. In the Afternoon cloudy; about 6. *p. m.* ſome Drops; the Night after a Shower, not conſiderable.

24. Hot about 10. *p. m.* a little Shower.

25. Clear; 26. in the Night ſome little Rain.

27. Held up; 28. at 9. *p. m.* a ſhort Shower.

29. At 5. *a. m.* Rain till near 7. a little paſt 7, till 9. after cloudy.

30. Cloudy; the Night after ſome Rain.

31. About 8. *a. m.* Rain for ½ Hour; from 9, till 12. it rained for the moſt part very violently; before 1. another Shower for ½ Hour; from a little after 2, till 5. with very great Thunder.

One Funeral on the 25th after but three Days Sickneſs, of which I can give no account.

The

The beginning of this Month, we had an extraordinary Number of Toads, which after ſome time were not to be ſeen.

The 14th we had wing'd Ants, as before.

24. Was the firſt Corn, the Seed-Time having been the middle of *March*.

June, 1687.

1. About 4. *a. m.* Rain for an Hour; paſt 1. *p. m.* for ½ Hour; the reſt cloudy and miſty.

2. From 2. *a. m.* till 5. continual Rain, 'tis ſaid there were ſome before; from 9. *a. m.* till ¼ Hour paſt 6. *p. m.* continual Rain, ſometimes very fierce; from ½ Hour paſt 9 at Night, Rain till paſt 10.

3. From ſix to a little paſt 7. *a. m.* a very gentle Rain, from thence till 1. *p. m.* moſt commonly very fierce; thence for a little while more moderate; but it rained hard again till 6. *p. m.* then it dropped but ſlowly, and ſo continued till about 7. in the Night ſome little Rain.

4. About 8. *a. m.* ſome Drops, thence clear

6. And 7. clear, except ſome few flying Clouds.

8. After 3. *a. m.* gentle Rain for near an Hour; then cloudy and ſome Drops, after 10. *p. m.* a Shower.

9. At 5. *a. m.* a gentle Shower, laſted till paſt 7. thence a very violent Rain till almoſt 9. ſome Drops after that; about 3. *p. m.* it began and rained till paſt 10. ſomewhat moderately.

10. Clear and hot.

11. Cloudy; about 8. *p. m.* a few Drops.

12. From about 2. *a. m.* till near 5. Rain. but not violent; a little before 6. a furious Storm of Rain, but little Wind; it laſted till ½ Hour paſt 7. about 3. *p. m.* a moderate Rain, till a little paſt 4. and from thence to 6. ſomewhat more than a Miſt; the Night after it rained a little.

13. Cloudy; in the Afternoon it droped a little.

14. About 8. *a. m.* a few Drops.

15. Somewhat cloudy.

16. Extreme hot; toward Night cloudy; about 5. *p. m.* a violent Shower for ½ Hour; from a little before 8. till paſt 10. it rained continually.

17. From 4. *a. m.* till almoſt 6. gentle Rain; ſo from a little paſt 6. till paſt 7. thence till paſt 3. *p. m.* cloudy, and now and then ſome Drops; then a violent Shower for the ½ of an Hour; half an Hour after 4. it rained again and continued till paſt 10. for the moſt part very furiouſly; with ſome little Intermiſſion it rained all Night.

18. At 3. *a. m.* it rained very fiercely; about ½ Hour after 6. it held up, but cloudy ſtill; from 8. *a. m.* till paſt 3. *p. m.* it rained, but moderately, then it held up a little, but rained after till paſt 6. all Day cloudy, and at Night a great Fog.

19. About 9. *a m.* ſome Drops; from 1. till paſt 3. *p. m.* very gentle Rain.

Thence to the firſt of *July*, foggy, Morning ſometimes hot, but for the moſt cloudy, and more temperate than could be expected from the Climate.

Two

Two Funerals, one the 9th of an Aſthma; the other 21. of a Fever.

We ſaw ſome Sorts of Inſects not uſual here, whether monſtrous or not I cannot tell. The moſt notable, a kind of Spider, about the Bigneſs of a Beetle, the form neareſt of a Crab-Fiſh, with an odd kind of Orifice viſible in the Belly, whence the Web proceeded.

July, 1687.

1. Extreme hot.

2. Foggy in the Morning; about 9. *a. m.* a few Drops; after clear.

3. In the Morning a great Fog; about 9. *a. m.* it rained ſmall Rain for near an Hour; toward night more foggy than ever before; about 6. *p. m.* ſmall Rain for a little time; from 8. till paſt 9. ſomewhat more briſk Rain, after that it cleared up.

4. From 9. *a. m.* to 3. *p. m.* ſmall Rain, the reſt foggy; between 10. and 11. *p. m.* ſome Rain.

5. From 2. *a. m.* till paſt 8 conſtant Rain, ſometimes very fierce, ſometimes moderate; about 10. *a. m.* ſome Rain; between 2. and 3. *p. m.* it began to rain, but continued not long from 8. *p m.* to 10. Rain.

6. From about 2. *a. m.* to 6. Rain, after fair.

7. Foggy and cloudy; between 7. and 8. *a. m.* ſome Drops.

8. Foggy in the Morning, otherwiſe clear and hot.

9. About 1. *a. m.* a ſmart Shower, between 3. and 5. ſome more Rain, the time of which

we know not exactly. The Day after foggy.

10. Very dull and Cloudy; from 3. *p. m.* till Night a very great Miſt.

11. Tolerably clear and very hot, yet ſomewhat foggy Morning and Evening.

12. Cloudy; thence to 15. in the Morning and Evening foggy; elſe very hot.

15. Cloudy; about 10. *a. m.* ſome Drops; from half an Hour paſt 2, till 4. moderate Rain; about 7. ſome Drops.

16. Cloudy, ſeveral times it drop'd a little, but nothing conſiderable.

17. A little before Day, a ſhort Shower; after cloudy; thence to 20. foggy Morning and Evening, and the moſt part cloudy.

20. Very clear all Day, and extreme hot.

21. Not foggy at all; yet ſomewhat cloudy, but about Mid-day it cleared up.

22. and 23. very clear and extreme hot.

24. Cloudy in the Morning; after as the two laſt.

25. Cloudy but not miſty nor foggy, ſultry hot.

26. In the Morning cloudy, after extreme hot.

27. Hot and clear.

28. Thin Clouds, through which the Sun ſhone very hot.

29. And 30. cloudy.

31. About 3. *a. m.* two ſhort Storms of Rain, the Day after clear and hot.

Two Funerals, one the 17th drowned; the other 21. of a Fever.

Auguſt

Auguſt, 1687.

To 5. clear, for the moſt part in the Mornings cloudy; but without Fogs; ſometimes very hot.

5. About 5. *a. m.* a Shower near an Hour long, about 7. another for ½ Hour, till 10. ſome ſmall Rain; thence cloudy till 1. about 7. *p. m.* a few Drops.

6. Cloudy all Day, ſometimes it dropped a little.

7. About 2. *a. m.* violent Rain, with Wind for above ½ Hour. The Day after cloudy.

8. And 9. cloudy and foggy.

10. More foggy than ordinary; about 10. *a. m.* a great Miſt, or a ſmall Rain for moſt part of the Day after.

11. Foggy as the former and miſty; between 8, and 9. *a. m.* a Shower of ſmall Rain; Afternoon clear.

12. Small Rain in the Morning; after as 11.

13. Clear and hot, the Land Breeze very ſtrong.

14. Cloudy all Day, the Land Breeze turn'd to a kind of Hermitan, but not troubleſome, nor continued beyond this Day.

15. Cloudy, ſeveral times very miſty, and ſome ſmall Rain.

16. Cloudy, but no Miſt; Afternoon clear.

Thence to 22. clear and hot, but the Nights colder than at other times.

22. At 6. *p. m.* cloudy, a wind Tornada but moderate, with ſome few Drops of Rain very large.

23. Clear and hot.

24. Cloudy and miſty at firſt; about 10. *a. m.* clear and hot.

25. Clear and hot.

26. Very foggy, Morning and Evening; for the reſt hot.

27. From 5. to 10. *a. m.* it rain'd ſmartly; thence cloudy, about 2. *p. m.* it cleared up for a while; about 9. *p. m.* a ſharp Rain for $\frac{1}{3}$ Hour.

28. Between 12, and 3. *a. m.* it rained about two Hours; about 7. ſome few Drops, after cloudy, in the middle of the Day, it cleared a little, but quickly overcaſt again.

29. In the Night ſome Rain; at 7. *a. m.* Rain for $\frac{1}{2}$ Hour; till paſt 12. a very thick Miſt; about 3. *p. m.* clear; at Night a very thick Miſt.

To the end cloudy and miſty.

Three Funerals, 6. one of a Fever, 7. another of a Conſumption, 29. a third of a Fever.

September, 1687.

1. And 2. as the laſt.

3. Some few Drops.

Thence to 8. cloudy alſo and miſty.

8. About 6. *p. m.* ſome ſmall Rain; between 8. and 10. *p. m.* for an Hour pretty briſk Rain.

9. In the Morning cloudy and miſty.

10. About 10. *p. m.* a little Rain.

11. Extreme hot and clear; in the Night, conſiderable Rain for ſeveral Hours.

12. About 10. *a. m.* ſome ſmall Rain, the Morning very foggy, Afternoon clear.

13. Clear and hot.

14. And 15. in the Morning extreme cloudy and ſome Drops of Rain.

16. Clear and extreme hot.

17. Moderate, about 7. *p. m.* ſome Drops; at Night alſo ſome Rain, not conſiderable.

18. Cloudy; in the Morning about 12. ſome Drops; all this Week Morning and Evening foggy and thick.

19, 20, 21. Extreme hot, the Fogs ceaſed.

22. About 1. *a m.* ſome Rain, the Day after cloudy.

23, 24, 25. In the Morning cloudy after very hot.

26. At Night alſo ſomewhat miſty, with many Flaſhes of Lightning, but no Thunder.

The like Flaſhes moſt Nights to the end of the Month, alſo often cloudy; at other times extreme hot.

Two Funerals, one the 19th of a Fever, the other the 26th, whoſe Diſeaſe I do not know.

October, 1687.

1. About 3. *a. m.* a very fierce Rain, for near an Hour, but milder toward the end; the Day after ſome flying Clouds.

2. About 4. *a. m.* a little Rain, the Day after as before; from 8. *p. m.* till 10. moderate Rain.

3. Cloudy; about 10. *a. m.* Rain for ſomewhat more than an Hour.

4. Cloudy, between 8, and 10. *p. m.* a very ſmart Rain for above an Hour.

5. About 9. *a. m.* a little Shower.

6. About 5. *a. m.* a little Shower; another paſt 6. the Day after and extreme hot.

8. Hot in the Morning; Afternoon a ſhew of a Tornada, with Thunder, and a conſiderable Wind, but no Rain.

Thence to 16. ſome flying Clouds, but generally hot.

16. About 4. *p. m.* a little Rain, the Sun ſhining then, and the whole Day very hot; about 8. *p. m.* a very ſtrong Tornada, Wind and Rain for about $\frac{1}{4}$ Hour, afterward the Rain continued, but more moderate, for near two Hours.

17. Clear and hot. 18. ſo too, except that about 3. *p. m.* there was a very ſhort Shower.

19. And 20. ſomewhat cloudy.

21. About 7. *a. m.* a few Drops, after clear and extreme hot, but quickly cloudy again; at 11. *a. m.* a violent Tornada, with very ſtrong Rain and Thunder for near an Hour; thence all the time, till Night, thick and miſty; till 2. *p. m.* Rain.

22. Cloudy, 23. clear and hot.

24. Somewhat cloudy; at 7. *p. m.* a little Rain.

25. Cloudy; about 11. *a. m.* Expectation of a Tornada, with ſome Thunder, but it ended in a few Drops of Rain about 1. *p. m.*

26. About 2. *a. m.* a very violent Tornada, and after the Wind, Rain not very fierce, which laſted till 8. *a m.* the Day after cloudy.

27.

27. About 10. *p. m.* a violent Wind with Rain, but it laſted not long.

28. About 3. *a. m.* a ſtrong Rain for near an Hour, the Day after extreme hot.

29. And 30. hot, yet with ſome Clouds.

30. Half an Hour after 11. *p. m.* began a very furious Tornada, the Wind was quickly over, but the Rain laſted with extreme violence about two Hours.

31. In the Morning very hot; about 2. *p. m.* a violent Tornada, with Rain and Thunder very near; it ceaſed ſometimes, but beginning again, laſted till near 4. *p. m.* afterward cloudy.

Three Funerals, all upon the 6th Day, two of Fevers, the other I know not.

November, 1687.

Clear and extreme hot till the 6th.

6. About half an Hour paſt 1. in the Morning a very violent Rain for more than an Hour.

Thence to 14. except that the 11th at Night there were ſome few Drops, very hot.

14 Extreme hot, about 9. *p. m.* a little Shower; the ſame Night about 1. a ſmart Rain for an Hour and half.

15. Hot; toward Night cloudy and foggy.

Thence to 19. very hot.

19. Some likelihood of a Tornada, but nothing followed.

20. About 1. *p. m.* a ſhort Shower: About

a

a quarter paſt 2. another not much longer; till Night cloudy.

Thence to 26. no Rain but cloudy and ſomewhat cooler; yet ſome Days extreme hot.

26. About 10. *p. m.* a ſhort Shower.

27. About 2. another; the reſt clear.

30. About 2. *a. m.* fierce Rain for about ½ Hour.

An

An Account of the Mooriſh *Way of dreſſing their Meat (with other Remarks) in* Weſt-Barbary, *from Cape* Spartel *to Cape* de Geer. By Mr. *Jezreel Jones.*

THE *Mauritanium* or *Barbarian Moor*, when he riſes in the Morning, waſhes himſelf all over, and dreſſes, then goes to their *Jiama*, or Church, ſays his Prayers and returns home, where his Wife, Concubine, or Slave, hath his Breakfaſt provided for him, which is ſometimes made of Barley or Wheat-Gruel; for I have known both. It is made ſomewhat thicker than ours, till it be ropy; they put Origan, and other Herbs, powdered, into it, which for ſuch uſes they keep dry'd all the Year; ſome will put a little Pepper and other Spice. I have often been treated with warm Bread, freſh Butter, and Honey, in a Morning, which is not ſeldom uſed among themſelves, an Hour or two after they have had Gruel; as alſo Haſty-Pudding, with Butter, and ſometimes Butter and Honey, (as the Gueſts are, and according to the Ability of the Entertainers.) Some again give *Cuſkſoo*, with Milk, others with Fleſh, a third with Roots. It is to be obſerved, when any one hath a Gueſt or Gueſts in his

his Houſe, the Neighbours bring their *Diſh* to welcome him or them, on account of the Reſpect and Love they bear to their Neighbour, as well as to ſhew their Readineſs to entertain the Stranger. This Practice is found conſtantly uſed throughout the whole Country among the *Moors*, one towards another, reciprocally. And I have as often found the like Civility, as I had occaſion to take up my Lodging at any Place, where I was acquainted with any of the Inhabitants. The *Jews* likewiſe ſhew great Civility to any *Chriſtian*, and treat him with what they have, as ſtewed or baked Hens, Capons, hard Eggs, boil'd or roaſted, which they preſs flat with Pepper, and Salt, Wine, Brandy, *&c.* They have generally the beſt Bread, and every thing elſe of the kind that they can get. They put Anniſe, and two or three other ſorts of Seeds, in their Bread; one is black and angled, taſtes almoſt like Carrot Seeds, and I think I have ſeen theſe ſometimes uſed in Bread in *Spain*; I know not the Names of the other Seeds in *Engliſh*, nor any Language but *Arabick*. They eſteem Honey as a wholeſome Breakfaſt, and the moſt delicious that which is in the Comb, with the young Bees in it, before they come out of their Caſes, whilſt they ſtill looked Milk-white, and reſemble (being taken out) Gentles, ſuch as Fiſhers uſe: Theſe I have often eat of, but they ſeemed inſipid to my Palate, and ſometimes I found they gave me the Heart-burn.

In *Suſa* I had a Bag of Honey brought by a Friend who made a Preſent of it, as being of great Eſteem, and ſuch as they preſent to Men

Men of greateſt Note among them. This, he told me, I was to eat a little of every Morning, to the quantity of a Walnut; it was thick as *Venice* Treacle, and full of ſmall Seeds. I uſed to breakfaſt on it for ſeveral Days together, taking the ſaid Quantity at a time; it always made me ſleepy, but I found my ſelf well, and in very good temper of Body after it. The Seeds were about the bigneſs of Muſtard, and, according to the Deſcription of them to me, and the Effects I found by eating the Honey and them, they muſt be a large ſort of Poppy-Seed. The Honey was of that ſort they call in *Suſe*, *Izucanee*, or *Origanum*, which (the Bees feed on) and theſe Seeds were mixed with.

Cuſcus, or *Cuſkſoo*, is the principal Diſh among them, as the *Olla* is in *Spain*: This is made of Flower of Wheat, and when that is ſcarce, of Barley, Millet, *Indian* Corn, *&c.* They ſhake ſome Flower into an earthen Pan, made on purpoſe, which is not glazed, ſprinkling a little Water on the bottom of the Pan firſt, and then working it with both their open Hands flat, turning them backwards and forwards to grain it, 'till they make it much reſembling *Sago*, which comes from the *Eaſt-Indies*. They ſtew Their Fleſh keeping their Pots cloſe covered, which are made of Earth, put the *Cuſkſoo* into an earthen Cullender, which they call *Caſkaſſ*, B. *vid.* Fig. and this Cullender into the Mouth of the Pot, C. that ſo all the Steam which ariſes from the Meat may be imbibed by the *Cuſkſoo*, which cauſes it to ſwell, and make it fit to be eaten: When it is enough, for they love every thing tho-

roughly done, they put this *Cuſkſoo* out into the Diſh they ſerve it up in, which is ſomewhat like D. and the *Cuſkſoo* being heaped up, they make (as it were) a Bed or Place for the Meat to lie in, then they put good ſtore of Spice, as Ginger, Pepper, Saffron, *&c.* This Diſh is ſet upon a Mat on the Ground, and four Men may eaſily ſit about it, tho' I have ſeen ſix and more at one Diſh; they ſit with their Buttocks upon the Calves of their Legs, with the bottom of their Feet on the Ground. If there are many to eat at this Meal, there are more Diſhes. This Diſh they have in uſe ſometimes at Breakfaſt, as well as Dinner and Supper, but it is commonly uſed for the two laſt Meals. They cover it with a thing made on purpoſe, ſomewhat like E. and it will keep hot enough two Hours. At a ſtately Entertainment they will have a Sheep roaſted whole, ſometimes a half, or a quarter, on a wooden Spit, or the moſt convenient thing they can find. They do not continually keep turning it, as we do, but leiſurely let one ſide be almoſt roaſted before they turn the other. The Fire is commonly of Wood burnt to clear Coal, and made ſo, that the Heat aſcends to the Meat. They baſte it with Oil, and a little Water and Salt incorporated. They let it be thoroughly roaſted; then they ſay, *Biſmiillah, in the name of God*; after they have waſhed their right Hands, and pulling the Meat in pieces, they fall to eating. It is to be noted, that they never uſe but their right Hand in eating, and one holds whilſt the other pulls it aſunder, diſtributing the pieces to the reſt, as he pulls it

off. They ſeldom uſe a Knife, and a Fork is a ſtrange thing among them. They are dextrous at this way of carving, and never flinch at the Heat or Warmth, for that would look mean, and might occaſion one more bold to take his Office upon him to perform. When they have done, they lick their Fingers, and as often as they have a hot Diſh, they waſh their Hands afreſh. Then they have *Alfdouſh*, or *Virmizzelli*, with ſome Meat on it, ſtewed Meat, well ſpiced, with ſavoury Broth; which after they have eat the Meat, they dip their Bread in the Sauce or Broth and eat it. They are cleanly in their Cookery, and if a Hair be found it is a capital Crime, but a Fly not, becauſe it has Wings, and may get in after it paſſes from the Cook's Charge or Management; to be well and ſtrongly ſeaſon'd is no great Fault; and if one ſhould ſay it is too high of Pepper, they'll reply, it is better to be *Ah* than *Faugh*; alluding to the Differences between a ſtrong, high, or hot, and ſavoury Taſte, and an inſipid, watry, or unpleaſant. *Cubbod* is ſmall Pieces of Mutton, with the Cawl of a Sheep wrapped on them. Some make good *Cubbod* of the Liver, Lights, and Heart. They pepper and ſalt them, and put ſweet Herbs and Saffron into them, and then roaſt them, and when they diſh them up, ſqueeze an Orange or two on them. Thus they uſe commonly in their ſtewed Meats, Lemon and Orange for Roaſt or Fiſh.

Elmoroſia is another: This is pieces of Beef, of Cow or Camel, ſtew'd with Butter, Honey, and Water; ſome will put *Rob* of Wine among

it; they add Saffron, Garlick, or Onions, a little Salt, and when 'tis enough, ſerve it up. They eſteem this a delicious Diſh, uſed moſtly in the Winter, and ſay it is good againſt Colds, notwithſtanding they ſay Beef is colder than Mutton. They have a piece of good houſewifry for a ready Diſh, which is likewiſe appropriated to the Winter Seaſon; and this I will give an Account of before I have done. Then they will treat you with Hare ſtew'd, ſtewed and roaſted Hens and Partridges: Theſe they disjoint, and let ſtew in Water, and Oil, or Butter, if they are not fat enough of themſelves. When they are almoſt enough, they beat a couple of Eggs, mix them with the Liquor, with Juice of Lemon or Vinegar, which they uſually have very good, and ſerve it up.

Then you may have more bak'd and roaſt, and another Diſh of ſtewed Meat, which for its Goodneſs would be eſteemed among us: They take a Leg of Mutton, cut off the fleſhy part, and leave out the Skin and Sinews. This Fleſh they mince very fine (with two Knives, one in each Hand) by holding them acroſs, which they manage with great Dexterity; they alſo mince ſome Suet, Parſly, Thime, Mint, *&c.* Then they take Pepper, Salt, and Saffron beaten together, and ſome Nutmeg: all theſe they add to the reſt, with about half a Handful of Rice; they cut an Onion, of the beſt ſort, half through, and take off the firſt lay, as not ſo fit for uſe, unleſs it be thick. (They that are curious take out the inner Skin, ſaying it is not wholeſom, and bad for the Eyes, it being the

the worſt thing in an Onion, which otherwiſe would be the beſt of Roots.) This Lay they fill with forc'd Meat, then the next, and ſo on, which makes them look like ſo many Onions; ſome they put up in Vine-Leaves of the beſt they can find for their Purpoſe. Whilſt this is doing, the Bones and Reſidue of the Leg of Mutton, being in moderate Pieces, are ſtewing, with as much Water as will juſt cover them; then they put on their forced Meat-Balls a top of the Meat, and a green Bunch of Grapes upon them, cover it, and let it boil till thoroughly enough. This I think is one of their beſt Diſhes, which they often uſe in *Feſs* and other Cities. *Pillowe*, or *Piloe*, is a Diſh very well known, made with Rice boil'd, with a good Hen, Mutton, and Spice, the Fleſh and Fowl being put on the Rice in a Diſh as *Cuſkſoo*, and ſo ſerved up.

A Buſtard, which they roaſt and ſtew, and make an excellent Diſh of its Guts, I eat of it once; to me it ſeemed very pleaſant and ſavoury, and very grateful to the Stomach. This Bird is fit for their King's Table, as likewiſe the Hedge-Hog, of which I will give an Account anon. Then they have *Ragoos*, made with Sparrows, Pigeons, *&c.*

Their Drink is plain Water, or Milk, and ſometimes *Rob* of Wine mix'd with Water. I was once treated with this by the Baſhaw of *Suſe*, *Abdolmeleck ben Alchotib*, and there was brought to me a great Bowl which held above three Quarts; he told me there was not above half a Pint of this *Rob* in it, and the reſt was filled up with Water. It was very generous

and pleaſant, and tho' I did not drink a quarter of it, yet I found the Strength in half an Hour. This they ſay is a Remedy againſt Cold likewiſe, and pretend to take it medicinally; tho' *Rob* of Grapes is lawful according to their *Law. Under this Pretext, many *Feſſee* Merchants to make *Rob*, or Vinegar, preſs all the Grapes in their Vineyards, put it up in great Jars, under Ground, and keep it long, ſo that it proves excellent Wine. When four or five merry Companions, with every one his Miſtreſs, appoint to be merry, they go out to their Vineyard or Garden, have Muſick, and all or moſt of theſe Diſhes, and there ſit and carouſe over a great earthen Bowl full of Wine, of about four or five Gallons, and ſo drink round in a Cup that will hold almoſt a Pint, like a large Tea Diſh, till there is none left; it often happens that they do not part till they have made an end of the whole Jar, which ſeldom is leſs then a Week's time. I have known ſome that have been nine Days ſucceſſively drunk; thoſe that are known to drink Wine or Piſs ſtanding, their Teſtimony will not be valid in Law.

* *Alcoran.*

In a Morning during this time of Merriment, they are for ſome ſavoury bit, *pickled Fiſh*, or *Eſcaveche*, or *Elcholle*. They are great Lovers of Fiſh, and have as great Variety and very good, which they fry in *Organ Oil*, ſtew, roaſt, and bake, with good ſtore of Spice, Onions, Garlick, Cummin, Parſley, and Coriander. The *Eſcaveche*, or fry'd Fiſh, is cut in thin Slices, and put into Vinegar, with the aforeſaid Spices, adding Saffron, and

and Pepper, *&c.* It will keep above a Month, and this they have commonly, as alſo pickl'd Limes, Olives, Capers, *&c.* They eat parched *Garavancas*, parch'd Almonds, and Beans, which they parch in a Pan with Water and Salt. Theſe, and other things, they have to reliſh their Glaſs of Wine, or give them a freſh Appetite to drink. They ſay to cure the ill effects of a drunken Bout, is, to take a ſwinging Cup of the ſame Liquor, which invites them to more and ſo on.

But I have left ſome Diſhes, by this Digreſſion, to give an Account of their extravagant Mirth.

The Hedgehog is a princely Diſh among them, and before they kill him rub his Back againſt the Ground, by holding its Feet betwixt two, as Men do a Saw that ſaws Stones, till it has done ſqueaking; then they cut its Throat, and with a Knife cut off all its Spines and ſinge it. They take out its Guts, ſtuff the Body with ſome Rice, ſweet Herbs, Garavanças, Spice, and Onions; they put ſome Butter and Garavancas into the Water they ſtew it in, and let it ſtew in a little Pot, cloſe ſtopped, till it is enough, and it proves an excellent Diſh. The *Moors* do not care to kill Lamb, Veal, nor Kid, ſaying it is a Pity to take the Suckling from its Dam. They eat with their boil'd Meat, many times Carrots, Turnips of two or three ſorts, Cabbage, Beans, and Peaſe, *&c.* which they have plenty, and very good. I have eat of Porcupine ſtewed, which much reſembled Camels Fleſh in Taſt, and that is the neareſt to Beef of any thing I know.

I come now to give an Account of the *Alcholea:* It is made of Beef, Mutton, or Camel's Fleſh, but chiefly Beef, which they cut all in long Slices, ſalt it well, and let it lie twenty four Hours in the Pickle. Then they remove out of thoſe Tubs, or Jars, into others with Water, and when it has lain a Night, they take it out and put it on Roaps in the Sun and Air to dry; when it is thoroughly dried, and hard they cut it into pieces of two or three Inches long, and throw it into a Pan, or Chauldron, which is ready, with boiling Oil and Suet ſufficient to hold it, where it boils till it be very clear and red, if one cuts it, which taken out, they ſet to drain: When all is thus done, it ſtands till cool, and Jars are prepared to pot it up in, pouring the Liquor they fried it in upon it, and as ſoon as it is thoroughly cold, they ſtop it up cloſe. It will keep two Years, it will be hard, and the hardeſt they look on to be beſt done. This they diſh up cold: ſometimes fry'd with Eggs and Garlick, ſometimes ſtewed, and Lemon ſqueezed on it. It is very good any way, either hot or cold.

Before I conclude, I willingly give an Account of their travelling-Proviſion, *viz.* Bread, Almonds, Raiſons, Figs, hard Eggs, cold Fowl, *&c.* But what is moſt uſed by Travellers, is *Zumeet*, *Tumeet*, or Flower of parch'd Barley for *Limereece*. Theſe are not *Arabian* but *Shilha* Names, ſo I believe it is of a longer ſtanding than the *Mahometans* in that Part of *Africk*. They are all three made of parched Barley Flower, which they carry

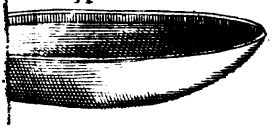
carry in a Leather Satchel. *Zumeet* is the Flower mix'd with Honey, Butter, and Spice; *Tumeet* is the ſame Flower done up with *Organ Oil*; and *Limereece* is only mixed with Water, and ſo drank. This quenches Thirſt much better than Water alone, ſatisfies a hungry Appetite, cools and refreſhes tired and weary Spirits, overcoming thoſe ill Effects a hot Sun and fatiguing Journey might occaſion. This among the Mountaineers of *Suſe* is uſed for their Diet as well at home as on their Journey. All things taken in Game, as Hawking, Hunting, and Fowling, are lawful for them to eat, if they take it before it be dead, ſo that they can have time to cut its Throat, and ſay, *Biſmiillahe*; or if he is known to be an expert Man at the Game, and ſays thoſe words before he lets the Hawk take its Flight, lets ſlip the Grey-Hound, or fires his Gun, it is lawful; all (I ſay, but Swine's Fleſh, and what dies of its ſelf) they have liberty to eat, and may ſell it. They tell us there is but one Part about the Hog or Swine that is unlawful, which they do not know, and are obliged to abſtain from the whole; but if they knew it, they would let us have but little to our ſhare. They eat Snails boiled with Salt, aud praiſe their Wholſomneſs. Fiſh of all ſorts are lawful. In *Taffillet* and *Dra* moſt of their Food is Dates, there are ten or a dozen ſorts. They have good Capons all the Country over, no Turkeys, Ducks, nor Geeſe but wild, and thoſe they have of two ſorts; Ducks, Teal, and Mallard, Corlews, Plovers, Snipes, Ox-birds, Pipers, a ſort of a black Crow, with

a bald Pate, and a long crooked Bill, is good Meat, and a hundred other ſort of Fowl. I have eat Antelope, which we have killed in hunting, and are very good food. They are as large as a Goat, of a cheſnut Colour, and white under the Belly; their Horns are almoſt quite ſtreight from their Head up, tapering gradually, with Rings at a diſtance from one another, till within an Inch and a half of the top; fine large black Eyes, long and ſlender Neck, Feet, Legs, and Body ſhaped ſomewhat like a Deer; they have two Cavities between their Legs, I think the Male as well as the Female. I have ſent of theſe Antelopes alive to *England*. There are many in a Herd, when at the ſame time they have Scouts, or thoſe who by running give 'em notice of an approaching Foe. When two lie down together, they lay themſelves ſo, that their Backs are towards each other, and the Head of one towards the Tail of the other, that they may ſee every way. Their Dung is ſweet and pleaſant enough. They are taken ſometimes by the Hawk, ſometimes by the Shot; for they are too ſwift for a Grey-Hound. Partridges in *Sus* commonly rooſt on Trees; there are ſo many Foxes which would otherwiſe deſtroy them.

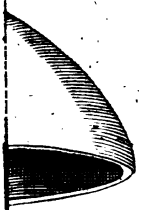
And here I ſhould make mention of another Diſh: The *Moors* will eat Fox if it be fat, either ſtewed or roaſted, but they do not care for it lean, which has occaſioned a Proverb among them on that Account, to wit, *Hellel deeb, harum deeb*; alluding to the Scruple might be made of its Lawfulneſs. Thoſe Words ſignify, a Fox

is

A



C



3 a N h h a a a t ſi h a ſſ C a A i ſ S n l i t t l ſ o L a u ſ n H o b d ſ c d L

is lawful, and a Fox is unlawful; *i. e.* fat, lawful; lean, unlawful.

Fruits and Sweet-Meats they have of many kinds, as of three or four ſorts of Pumpkins, Macaroons, Almonds prepared many ways, Raiſins, Dates, Figs dry and green, excellent Melons of two or three ſorts, and Water-Melons, Pomgranates of ſeveral kinds, Apples, Pears, Apricoks, Peaches, Mulberries, white and black, Plumbs and Damaſcus Cherries, * Grapes of many kinds, and very good, and if they would aſſiſt Nature, they might have every thing in perfection.

Lat. 30. or thereabouts.

* Grapes in *Meſſia* I have known as big as a Pigeon's Egg; but they do not make Wine.

Their Salading is Lettuce, Endive, Carduus, Parſley, Apium, and other ſweet Herbs, Onions, Cucumbers of ſeveral kinds, ſome about a Yard in length, and two or three Inches thick, and hairy, (this is eſteemed the wholeſomeſt) Radiſhes, *Fumatas*, or Apples of Love, all which they will cut, and put Oil, Vinegar, and Salt, with ſome red Pepper: This Salad they eat with Bread. They have a Fruit called *Baraneen*, in *Spain*, *Beragenas*; theſe they ſtew with their Victu-, and ſometimes cut them in thin Slices, and y them; it makes a pretty Diſh. When the *Moors* have feaſted, every one waſhes his Hands and Mouth, thanks God, and bleſ-es the Hoſts and Entertainers from whom they had it; they talk a little, or tell ſome Story, and then lie down to reſt, where I ſhall leave them at preſent, and do beg your Pardon for ſo tireſome and frivolous a Diſcourſe.

4

A Letter from Mr. John Monro *to the Publiſher, concerning the Catacombs of* Rome *and* Naples.

Sir,

THE Catacombs are an obſcure Argument. I have ſeen thoſe of *Rome*, I have ſeen thoſe of *Naples*, and as they ſay there are Catacombs in the Neighbourhood of all the great Towns of that part of *Italy*, I had been glad to have ſeen them where-ever they are. They are an obſcure Argument indeed; but perhaps the greateſt Obſcurity about them is, that a Matter that has ſo much exercis'd the Pens of the Moderns ſhould be totally neglected by the Ancients: Neither the Name nor the thing is found in the latter, whereas among the former, Antiquaries and Travellers are full of them. All they into whoſe way they come, think they do nothing if they do not exhauſt them before they leave them; they take all their Dimenſions, and meaſure their height, their breadth and their length; they ſurvey all the little Rooms, ſearch every Hole and Corner, criticize nicely on the Quality, and calculate the Age of the poor Painting and Inſcriptions, and make Excurſions into other Arguments, to find out the end for which they were

were made. The Catacombs are a narrow Gallery dug and carried a vaſt way under Ground, with an infinite Number of others going off it on all Hands, and an infinite Number of little Rooms going off the Principal, and them too. Thoſe commonly ſhew'd Strangers are thoſe of *San Sebaſtiano*, thoſe of *San Lorenzo*, thoſe of *San Agneſe*, and the others in the Fields a little off of *Sant Agneſe*. They take their Names from the Churches in their Neighbourhood, and ſeem to divide the Circumference of the City without the Walls between them, extending their Galleries every where under, and a vaſt way from it, ſo that all the Ground under, and for many Miles about it, is ſaid to be hollow. Now there are two ſorts of Authors that run into Extravagance on this Subject; the one will have them made by the primitive Chriſtians, adding, that in the times of Perſecution they liv'd, held their Aſſemblies, and laid up the Bodies of their Martyrs and Confeſſors in them. This is the Account that prevails at *Rome*, and conſequent to it there are Men kept conſtantly at work in them. As ſoon as theſe Labourers diſcover a Repoſitory, with any of the marks of a Saint about it, Intimation is given to the Cardinal Treaſurer, who immediately ſends Men of Probity and Reputation to the Place, where they find a Palm painted or engraven, or the Cypher XP, which is commonly read *pro Chriſto*, or a ſmall round Projection in the ſide of the Gallery, a little below the Repoſitory; what is within it is carried to the Palace. Many of theſe

theſe Projections we have ſeen open, with pieces of the Vials in them; the Glaſs indeed was tinctured, and 'tis pretended that in theſe Vials was conſerved the Blood of the Martyrs, which was thus laid up nigh their Bodies, towards the Head, to diſtinguiſh them from thoſe of the others that were not called to the Honour of laying down their Lives for the Faith of the Goſpel. After the Labourers have ſurveyed a Gallery, they do up the Entry that leads into it; thus moſt of them are ſhut; nor are more left open than what is neceſſary to keep up the Trade of ſhewing them to Strangers, which they ſay is done to prevent what has often happened, I mean peoples loſing themſelves in theſe ſubterraneous Labyrinths; by this Conduct depriving us of the means of knowing whither and how far they were carried. To this it may be juſtly excepted, that allowing the Catacombs to be proper for the end for which they are preſumed to be made, and that the Chriſtians of that Age were in a Capacity of making that Convenience, for themſelves to live and aſſemble in below Ground, at a time when 'twas ſo very unſafe to appear above it; yet to ſuppoſe that a Work of that Vaſtneſs and Importance could be carried on without the Knowledge of the Government, is to ſuppoſe the Government aſleep, and that that was actually done under its Noſe, that muſt neceſſarily have alarm'd it, had it been attempted on the Frontier of the Empire.

The other ſort of Authors give indeed a mighty Idea of the Catacombs, repreſent them

them as a Work of that Vaſtneſs, that the Chriſtians in the perſecuting times had not number enough to carry it on; but then moſt unadviſedly with the ſame Breadth they confound them with the *Puticuli in Feſtus Pompeius*, where, at the ſame time that the ancient *Romans* uſed to burn the Bodies of their dead, the Cuſtom was to avoid Expence, to throw thoſe of the Slaves to rot.

This is not all, the *Roman* Chriſtians, ſay they, obſerving at length the great Veneration that certain Places gain'd by the Preſence of Relicts, reſolved to provide a Stock for themſelves; entring therefore the Catacombs, they made in ſome of them what Cyphers, what Inſcriptions, what Painting they thought fit, and then ſhut them up; intending to open them again upon a Dream, or ſome other important Incident. The few that were in the Secret of this Artifice, either dying, or as the Monks, who were the only Men that ſeem to have had Heads adapted to a Thought of this Quality, were ſubject to ſo many Removes, being tranſported to other Places, the Contrivance came to be forgot, and thoſe Galleries continu'd ſhut, till Chance, the Parent often of great Diſcoveries, open'd them at laſt. Thus they conclude, the Remains of the vileſt part of Mankind are trumped up in the Church for the Bodies of the moſt eminent Confeſſors and Martyrs.

To leave the latter part of this Tale to ſhift for it ſelf as well as it can, either the Catacombs are not that great Work they are repreſented to be, nor to be found every where about the City, or 'twas very improper in

Feſtus

Feſtus Pompeius to call them by the little Name of *Puticuli*, and ſo confine them to one Place only, that I mean unknown now without the *Eſquilin*-Gate. Indeed the Characters of the Places are ſo very unlike, that one would wonder how a common burying Place, where in Holes Bodies were thrown together to rot, came to be confounded with Repoſitories cut in the Face of a long Gallery, one over another, ſometimes to the Number of ſeven, in which Bodies were ſingly laid, and handſomly done up again, ſo that nothing could offend the view of thoſe that went in, eſpecially with the little Rooms of the faſhion of Chapels, that have all the Appearances of being the Sepulchers of People of Diſtinction.

The Remark, *Puticulos antiquiſſimum ſepulturæ genus appellatos, quod ibi in puteis ſepelirentur homines*, is that of an Etymologiſt, that would be now thought to ſpeak againſt all the Property of Language, if he apply'd the Name to our Graves or Vaults, to which it may with more Juſtice and Reaſon be apply'd, than to the Galleries of the Catacombs, and the Rooms that go off them. What the Particulars were is not difficult to define, after what we have ſeen ſo often. When the Perſecutors ſpilt the Blood of ſo many Martyrs, they uſed to dig Holes perpendicularly to the Ground, and to throw their Bodies promiſcuouſly in them; of this the Memory is ſtill conſerved, Churches being built in the Places where the Holes were made, and little Monuments erected over the Holes themſelves, to which the Name of *Putei* is contained to this Day.

This

This is the true Notion of the *Puticuli*, Holes dug perpendicularly in the Ground to throw Bodies indifferently and without any Decency in; and according to the Argument this ought to be the Conduct of the ancient *Romans*, with reſpect to their Slaves, as implying Simplicity and the care to avoid a greater Expence; but then what's all this to the Galleries and Chambers of the Catacombs, where Decency and Diſtinction of Quality is nicely obſerved; and that, if they were looked after, and kept in better Repair, would be without diſpute the nobleſt Burying-Place this Day in the World? As often as they fall under my Conſideration, I cannot forbear thinking they were made for this end by the ancient *Romans*, and made in conſequence of theſe two ancient Opinions, that the Shadows hate the Light, and love to hover about the Place where the Bodies are laid, they appear ſo eaſie and decent a Reſting-Place for the one, without the leaſt Fear of being ever diſturbed, and at the ſame time there is provided a noble and vaſt Convenience full of variety for the others, to ſpace themſelves freely and with Pleaſure in.

I think 'twill not be denied, that laying up the Bodies in Caves was the original way of diſpoſing of the Dead; this was that of the *Phœnicians*, and as they were the Men that with their Colonies peopled the weſtern Parts of the World, 'tis more than probable they carried it along with them whitherſoever they went. Afterwards, as Men grew great and powerful, they erected noble and magnificent Monuments for themſelves above Ground;

Ground; at length others of inferior degree imitated them, all leaving Room enough and excluding the Light: But then interring as we do now in the open Air, or in Temples, was never the manner till Chriſtianity brought it in. Of the whole we have many Inſtances and *Ill Signior Abbate Bencini*, Bibliothecary of the *Propagandar*, a Gentleman of good ancient Learning, aſſured me in the Converſation I had with him on this Argument, that on the great Roads in moſt parts of *Italy* little Catacombs have been and are ſtill found under Ground, and that 'twas the Cuſtom to build little Houſes over them. This, and the Teſtimony of the Labourers whom I conſulted on the matter, made me abandon an Opinion of which I was once fond, that the Catacombs are of the Nature of our Gravel-Pits, as old as the City it ſelf, and yet out of them was taken the *Puzzolana*, the Famous Ingredient in the Roman Mortar. The ſame learned Gentleman added, relating to the Marks of a Martyr, that they don't conclude much; that the ſo famed Cypher XP was in uſe among the Ancients long before Chriſtianity begun: And when I aſked him what the meaning of it might be among them? returned, that 'twas compoſed of the two *Greek* Letters XP, under which ſomething myſtical was comprehended, but that he met with no Author that gave account what the Myſtery was.

Thus, after multitude of Thoughts about the Catacombs, I'm forced to take up with this; ſo natural it is, ariſing from the ſole Theory of the Place, and falls in ſo appoſitely

with the Religion and Practice of the Ancients, among whom the *Dii Manes* were the tutelary Gods of the Country, and *D. M.* at the Head of an Inſcription, argues the Moles, the Sepulchre, the Monument, *&c.* was in the primary intention made for and dedicated to the Soul. Upon the ſame Maxims, in foreign Expeditions, when a Hero died or was kill'd, as the Body was liable to a quick Corruption, and for that Reaſon unfit to be tranſported entire, they fell on the expedient of burning, in order to bring home the Aſhes, to oblige the *Manes* to follow, that ſo the Country might not be deprived of the Benefit of its Tutelage. This I humbly conceive was the Original of burning, which by Degrees became more and more univerſal, till at laſt the Pomp and Magnificence of it reconciled it to all that were able to go to the length of the Expence.

As for the prejudice of the Silence of the ancient Authors in this Matter, 'tis eaſily removed, and to be regretted at the ſame time that the Authors of all Ages too much neglect the Cuſtoms of their own time. Writing for the ſatisfaction of their Cotemporaries, they think it impertinent to trouble them with the Account of what they ſee tranſacted every Day. By this means the ancient Cuſtoms, with the Time, and Reaſons of their Diſuſe, are loſt with reſpect to us, and ours with the ſame Circumſtances may come to be ſo with Relation to Poſterity. As the Authors are pleaſed to adopt them for their Children, one would wonder greater care is not taken not to entail viſible Occaſions of

Complaint on them; nay, one wou'd wonder more, to ſee theſe Gentlemen ſo little ambitious of a future Reputation, when they may infallibly aſſure it themſelves, without reſigning the preſent, by tranſmitting the Knowledge of things, the Knowledge of which may in a ſmall ſeries of Years become otherwiſe irretrievably; they cannot but obſerve every Day what Eſteem is placed on thoſe Authors, to whom we are forced to go, to find in them what cannot be found elſewhere, to compare with the others, in whom nothing is to be found, but what Men of Reaſon are able to find at Home.

Upon the whole, the Catacombs I humbly conceive were the Burying-Places of the ancient *Romans*; at length the manner of burning, which they received from the *Græcians*, coming by degrees to prevail univerſally, they fell under a total Neglect. This is the State in which the primitive Chriſtians muſt be ſuppos'd to have found them; 'tis not to be imagined they could have made any uſe of them, at a time when 'twas the daily Practice to lay up even the Depoſitions of the Slaves in them; ſo that either the Chriſtians made no uſe of them at all, or they never were the Burying-Place of the Slaves. Now as theſe are Suppoſitions that naturally deſtroy one another, one would count it more ſafe to follow the faint Light of a glimmering Tradition than abandon one's ſelf to the Conduct of an *Ignis fatuus*, that for ought a Man knows is actually miſleading him, ſo I beg leave to call the Teſtimony of *Feſtus Pompeius*, that may rather be applyed to any other thing than

than to the Galleries of the Catacombs, carried under Ground, they ſay 20 Miles from the City in ſome Places, and no Body knows how far in others, and to that vaſt number of Chambers that go off them. Thus therefore the Chriſtians finding them in a ſtate of Neglect laid up the Bodies of their Dead in them; and perhaps when the Perſecution was hot, concealed themſelves and kept little ſeparate Aſſemblies in their Chambers. At laſt the Empire turning Chriſtian, they fell again into the old ſtate of Neglect, in which they continued till upon the reading of I have forgot what Author that makes mention of them, they came to be looked into and ſearched. What I have writ relates to the Catacombs of *Rome*, thoſe of *Naples* are quite another thing, of which *per* next. I am

Sir,

Your moſt humble Servant,

Marſeilles,
Aug. 22. 1700.

J. Monro.

An accurate Deſcription of the Lake of Geneva, *not long ſince made by a Perſon that had viſited it divers Times in the pleaſanteſt Seaſon of the Year; and communicated to the Publiſher by one of his Pariſian Correſpondents; engliſhed as followeth.*

YOU have reaſon, *Sir*, to demand of me an Account of the *Lake of Geneva*, which, in my Opinion, about this Seaſon of the Year (in *June*) is one of the moſt pleaſant Places of the World. This is the third time I have viſited it, and I am, if I may ſay ſo, more charmed with it than the firſt.

I ſhall ſay nothing of the *Alpes*, nor of mount *Jura*, which do environ it, which by this Lake, as by a large Ditch, are ſeparated from one another: For that would not give you a ſufficiently fair *Idea* of the Country. Be pleaſed therefore to repreſent unto your ſelf a Croiſſant of Water, one extremity whereof is eighteen Leagues diſtant from the other, and the Banks of which are gently raiſed to ſome Heights, then to Collines, and at length to ſtupendious Mountains; which yet are not ſo linked to one another but that

that they leave betwixt them Interſtices of fifteen or twenty Leagues Proſpects, checkered by Meadows, Corn-Fields, Orchards, Vines, Foreſts of Fir-Trees, Snow lying on the ſides of the Rocks. All theſe Objects, which at a Diſtance are confounded, and ſeem to make but one, have near hand their ſeveral Beauties: So well is the Country interſected by Rivulets, which, after they have ſerved to make Iron, Paper, &c. run into the Lake, carrying with them very many Fountains.

But leaving theſe Things, I ſhall now content my ſelf to entertain your Curioſity by giving you a candid Relation of what I have there obſerved in the Space of four Months.

Although I have told you, that this Lake hath the Figure of a *Croiſſant*, yet that point, where is *Geneva*, is ſomewhat longer and more extended than the other. This Croiſſant where 'tis largeſt, which is from *Morges* to *Thonon*, is about five good Leagues over. That which hinders from making an exact Eſtimate of its Largeneſs in other Places, is, that the Winds by driving the Water towards the Banks have made certain Points, which advance far into the Lake, in ſuch ſort that when one happens to be oppoſite to the other, the Lake ſeems to be narrow: As may be obſerved in going from *Geneva* to *Nion*, where it ſeems as if the *Pharus* or Watch-Tower of *Prangin*, which is in *Suiſſe*, did almoſt touch *Savoy*; whereas yet one is a League diſtant from the other. And, what is remarkable, is, that at the coming out of

this Streight, the Lake hath there almoſt its greateſt breadth and Depth.

The Water of this Lake is very good to drink, and ever ſo limpid, that even in the rolling of the Waves, which ſometimes go high enough, the Water is not troubled but along the Banks. And if one do attentively look down from the Caſtle of *Chilon* or from any of the neighbouring Heights into the bottom of the Lake, he may ſee high Mountains under the Water. And the Water is ſo deep before *Veuvay*, that the ſounding Line at the end of four hundred Fathoms ſeems, becauſe it will not ſtay, to touch upon ſomething ſlippery. 'Tis held to be 500 Fathoms deep before *Roole*; and 'tis affirm'd, that near this great Depth there may be ſeen a kind of *Iſle* under Water.

The *Rhone* enters at one of the Points of the Croiſſant into the Lake, and iſſueth out at the other; but with this Difference, that whereas he comes in dirty and miry, he ever goes out ſo pure and clear, that under the Bridge of *Geneva*, where the Water is deep twenty five Feet in Summer, you may well diſcern the ſmalleſt Stones at the bottom. And the ſame Water, which in this Place appears of a ſaphyring Blew in the Shade of the Houſes, appears altogether Green, nor is ſo tranſparent, when the Sun ſhines on it.

There is a great Diverſity of Opinions as to the *Current* of the *Rhone* in the Lake; ſome maintaining, that *it* may be diſcerned, others denying it. Having heard the Sentiments of the curious of *Lauſanne* and *Geneva*, and the Opinions of the moſt knowing Fiſher-

men

men that are there in great Number, and eſpecially at *Coupet*, I believe with the latter; that, although the *Rhone* entring into the Lake loſeth its Violence, yet doth it ſtill keep ſome ſenſible Motion in ſome Places, and every where obſervable, and that no Trouts are taken any where in this Lake, but in this Current of the *Rhone*; which is what theſe Fiſhermen call, to go and fiſh *ſur le mont*.

Others there are, that go further and ſay, that one may every where diſtinguiſh the Water of the Lake from that of the *Rhone*: But the Fiſhermen will not allow this, but aſſert, that there is no other Mark than thoſe lately alledged, *viz.* of the Trouts, and the Current; and that the latter of theſe is alone ſufficient, in calm Weather, to obſerve the Current of the *Rhone* from the place of its entring the Lake unto that of its going out.

The Water of this Lake commonly begins to increaſe about the end of *January*, or the beginning of *February*, and continues to do ſo unto the twentieth of *July*, and often unto the very Month of *Auguſt*; and then it inſenſibly decreaſeth, ſo that the Water is leſs high in Winter than Summer by twelve or fifteen Feet; the Froſts draining the Springs, or rather freezing the Waters that iſſue out of them.

About this Increaſe of the Water there are alſo different Opinions. 'Tis true, they all believe in general, that the principal cauſe of the Increaſe of the Water is the melting of the Snow, and of the Mountainous Ice, that is in the Winter formed of

the Waters of the Springs and Torrents, which the Froſt fixeth. This is ſo true that when there is much Snow in Winter, the Waters are very high the enſuing Summer. But when great Rains chance to fall in *January*, then the Snow, not yet being well hardned, melteth on a ſudden all together. And when this melting is not ſo violent, all the Snow that will melt, melts at the end of *May* or at the beginning of *June*; ſo that, there remaining but the Stock of Ice for entertaining the Increaſe of the Water unto the Month of *Auguſt*, ſome have thence been induced to ſay, that this Increaſe which amounts, as has been ſaid, to 15 Feet Water generally all over the Lake, is cauſed by the Herbs, growing, as they pretend, at its bottom in great Abundance; and that theſe Herbs, whilſt growing, do force the Water upwards, and dying in Autumn make the Water to ſink lower. Which is not ſatisfactory to me, becauſe there are no Herbs ſeen upon the Lake, and very little within it, and the Banks being very dry.

Others there are, that will have this Water rarified by the Heat of the Sun, and thereupon ſwelled on the Borders, hot Water not being ſo high in the middle as cold.

This is certain, that all the Rivers and Torrents, that fall into this Lake, carry with them ſtore of Stones and Earth, which may indeed enlarge and raiſe it: But ſuch an augmentation or riſe cannot be ſenſible but from Age to Age; not to mention, that in Winter, whilſt the Water is low, the Stones of the Lakes are carried away for building or fortifying at *Geneva*.

At

At the iſſuing out of the Barres, that form *Geneva*, on the ſide of the Lake, are ſeen in the Water two or three huge Flints, ſtanding out of the Water; the chief of which they call *Niton*: And the Tradition is, that it formerly was an Altar conſecrated to *Neptune*; there being alſo a place cut out in the middle, which they take to have been the place for the Sacrifice. On this Flint ſeven or eight Perſons can ſit; and ſometimes, when the Waters are very low, there are found about it Knives, and Needles as thick as Bodkins of Tweeſes, and much longer; both of Braſs, well enough made, and eſteemed to have ſerved for their Sacrifices.

This Lake in ſerene and calm Weather appears ſometimes, and that even before Sunriſing, as if it were made of divers Pieces differently coloured; Part of it being browner than the reſt, which ſeems to be cauſed by a Breath of Wind paſſing thorough the Water, coming either from the bottom of the Lake, or from above; tho' others think this gentle Agitation to proceed from ſome Springs that are at the bottom, making the Water ſhiver above. But that part of the Water, that is not moved, appears as even and ſmooth as a Looking-Glaſs, or like Water traced by a Ship. And as for the Colours, they are, in my Opinion, an effect of the neighbouring Mountains, the different Images of which, being confounded in the Water, make an appearance of very pale Colours.

After that the *Rhone* is entred into the Lake, he retakes not his impetuous Courſe before a quarter of a Mile's diſtance from its coming

coming forth again, that is, above *Geneva*. And the nearer it comes to that Town, the more its Bed becomes narrow, and conſequently its Courſe more rapid. Yet this Rapidneſs hath been in our times once ſurmounted by Wind and once by Water. To underſtand which, you may imagine that in *Geneva* there is a ſtreak of Land about an hundred Fathoms long, which divides the *Rhone* into two Parts, paſſing under four Bridges, then covered with Houſes. From the Point of this Iſle unto ſeveral Ranks of Stakes on that Side of the Town, there are about a thouſand common Paces. This whole ſpace of Water, which makes the Figure of an V (whereof the Iſle is the Point, and the Town forms the ſides, and the Stakes the empty place of the end) hath been once laid dry by a violent Wind, after this manner. One Day in the Winter of the Year 1645. there aroſe in the Morning about 9 a Clock ſo furious a Wind, that not only it uncovered the Houſes, but alſo laid dry the Bed of the *Rhone* above the Bridges, ſo that many, in the View of all the Town, croſſed quite over it dry-foot, and one of the Sons of M. D. *Aubigny* took up ſome Medals, which he found in his Way. This Paſſage was free during an Hour's time; at the end of which the River retook its force. At that Seaſon the Water being very low, and a Weſt-Wind, to arrive at *Geneva*, being preſſed by the high Mountains that bring it upon the Town as by the Noſe of a Pair of Bellows; it came to paſs, that that Wind did violently bear upon the Water near the ſaid

Bars keeping ſuſpended the Water that was beyond, and thoſe Waters, that were beneath running away downwards by a Declivity, and under the Shelter of the Houſes. Whilſt I was ſcrupling at this Relation, they brought me *Gallaſius* his Commentary upon *Exodus*, Printed 1560. where 'tis recorded, that the like Accident had faln out at *Geneva* at the time when that Miniſter lived there, a South Weſt Wind having made the *Rhone* to recoil into the Lake, and many People having thereupon paſſed over dry for an Hour's time.

Concerning the other Accident; you may remember that the River *Arve*, which is a kind of Torrent, falls into the *Rhone*, about a 1000 Paces beneath *Geneva*. In the Month of *December* in the Year 1652. the ſaid *Arve* did ſo extraordinarily ſwell, that not only it over-run its Banks with Impetuoſity, but alſo interrupted the Courſe of the *Rhone*, and forced it to re-enter into the Lake for the ſpace of fourteen Hours; though ſome do eſteem, that the *Arva* diſ-gorged it ſelf for that time into the Lake, by paſſing *over* the Water of the *Rhone*, which, in their Opinion, continued its Courſe under the Water of the *Arva*. However the Water was ſeen at *Geneva* to re-enter into the Lake.

But to conclude, this Lake doth very much abound in Fiſh; but that which is obſervable is, that thoſe Fiſhes have as 'twere cantonized themſelves, and divided the Lake among them. The *Trouts* are not to be found there, but, as hath been already mentioned, in the Current of the *Rhone*, the Carps have taken

ken up their quarter towards *Veuvay*: The *Pikes* and *Pearches* have alſo their Habitations apart. But ſome other Fiſh, that are but Paſſengers, not living conſtantly in the Lake, ſpread themſelves almoſt every where indifferently.

The great Trouts paſs out of the Lake for four Months of the Summer, and are taken in Autumn when they are returning thither. The Fiſhing is farmed out at *Geneva*, and there are Conſervatories where many of thoſe big Trouts are kept, among which there are ſome that weigh fifty Pounds. Sometimes they catch Pikes there of eighty Pounds Weight; and a Pound Weight at *Geneva* you know to be eighteen Ounces.

In the Months of *July* and *Auguſt* they fiſh there for the Fry of Pearches, at a time when they are no bigger than the ſmalleſt Taggs. Theſe are a very delicious Diſh, there called *Mille Cantons*.

I ſhall add no more than put you in mind of that Duke of *Savoy*, who renounced his Crown and the Pontificate it ſelf, to paſs deliciouſly the reſt of his Days at *Ripialles*, where he made ſo good chear to all that viſited him, that to expreſs a very merry Entertainment, they ſay ſtill, *faire Ripialles*.

Part

Part of a Journal kept from Scotland *to* New Caledonia *in* Darien, *with a ſhort Account of that Country. Communicated by Dr.* Wallace, F.R.S.

September 2. we weighed at *Maderas*, and were under the Tropic of *Cancer* by the 10th of the Month, at which time the uſual Ceremony of Ducking from the Yards-Arm was performed on thoſe that could not pay their Tropick Bottle. All this time we had a brisk and conſtant Trade-Wind, which laſted three days more, but afterwards we had it more variable than is uſual in that place of the Sea.

The 28th we made *Deſeada*, a ſmall high Iſland, about a League in length and as much in breadth; it is full of Trees, but whether it affords Water or not I know not. It is uninhabited. Next Morning we were betwixt *Antegoa* and *Monſerat*, belonging to the *Engliſh*, both pretty large and mountanous. *Antegoa* is peopled with *Engliſh* for the moſt part, and *Monſerat* by a Mixture of *Engliſh* and *Iriſh*. Their Product is Sugar and Tobacco. We were in the Afternoon cloſe by *Redonda*, a ſmall Rock above a Mile long, inhabited only by Noddies and Boobies. When we were ſome Leagues from *Redonda*,

we

we ſaw at the ſame time *Antegoa*, *Monſerat*, *Redonda*, *Nevis*, *St. Chriſtophers*, and *Statia*. We ſailed cloſe by *Nevis*, it bearing North of us; it is a ſmall well peopled Iſland, its Product is Sugar. They twiſted the Flag at the Harbour, and we ſhewed them the Company's Colours. *St. Chriſtophers* is a large Iſland, ill peopled, belongs half to the *Engliſh*, half to the *French*. Night parted us from theſe Iſlands, and next Day, which was the 30th, we came in ſight of *Santa Cruz*, belonging to the *Spaniards*. When we were within four Leagues they held a Council. The *Unicorn* and *Snow* were ſent to St. *Thomas*, a ſmall Iſland belonging to the *Danes*; it is a free Port, and they ſay is well fortified. We went on to the Southward of the Iſland, and next Day, being *October* 1. we were about 12 a Clock paſt the S. W. Corner. It is very level towards the South. That Night we got a ſight of *Crab Iſland*, and next Day,

October 2. we came into it and ſent ſome of our People aſhore, and took Poſſeſſion of it in the Company's Name. *October* the 4th we ſtood to the Leeward, hearing there was a Harbour there; when we came we ſaw the *Danes* Colours flying on the Shore, for the Governour of St. *Thomas* had ſent 14 Men and a Captain to take Poſſeſſion of it in the King of *Denmark*'s Name. Our Counſellors ſent to know their Buſineſs there, and he told them this, but he found that we had taken Poſſeſſion of the Place before they came from St. *Thomas*. They gave in their Proteſt, yet ſeem'd to be glad enough of our Neighbourhood. We had notwithſtanding our Flag upon

upon the Shore all the while we ſtayed, with 100 Men, and Captain *Melean* Governour; they ſtayed till we were gone, but would certainly march next Day, otherwiſe the *Spaniards* of *Porto Rico* would not miſs to take them off.

The 6th, Captain *Pinkerton* and the *Snow* came in from St. *Thomas*, with old Captain *Aliſon* along with them for a Pilot. On the 8th we left this Place, and on the 17th made *Noſtra Signiora della Popa*; we lay aſide there along the Coaſt, until the 3d Day of *November*, generally loſing by Night what we had gained all Day.

Crab Iſland is about ſix Leagues long, and in ſome Places five broad, the Soil is very good. It's all full of Trees; all the South Side is full of Bays very fit for anchoring in, but the beſt of all is to the Leeward, where the *Dane* hoiſed his Colours. It would have been worth our while to poſſeſs it, had we not been a coming to a better Country. It has this Inconvenience, that nothing but ſtrength of Men, or Peace with every Body, can render it ſecure. It is called *Crab Iſland*, from the multitude of Land-Crabs there.

November 3. We anchored before *Golden Iſland*, and ſent in our Pinnace to the Bay. The Natives had hoiſed a white Flag in ſign of Peace, and told us a great many Stories of Captain *Swan*, Captain *Davies*, and others, for they took us for *Engliſh*, by reaſon of our red Fly; but we took no notice of the Men they named. At laſt they aſked us our Buſineſs; we told them we deſigned to ſettle among them, and to be their Friends.

They

They told us we were very welcome, and that by Prediction they had expected us theſe two Years; for they ſay that two Years ago it was foretold them that a People ſhould come and live among them, that would treat them civily, and teach them good Manners. We converſed ſome time with them, and after viewing the Harbour came aboard.

The 4th we came into the great Harbour of *Caledonia:* It is a moſt excellent one, for it is about a League in length from N. W. to S. E. It is about half a Mile broad at the Mouth, and in ſome places a Mile and more farther in. It is large enough to contain 500 Sail of Ships. The greateſt part of it is Land-lock'd, ſo that it is ſafe, and cannot be touch'd by any Wind that can blow the Harbour, and the Sea makes the Land that lies betwixt them a Peninſula. There is a Point of the Peninſula at the Mouth of the Harbour, that may be fortified againſt a Navy. This Point ſecures the Harbour, ſo that no Ship can enter but muſt be within reach of their Guns. It likewiſe defends half of the Peninſula, for no Guns from the other ſide of the Harbour can touch it, and no Ship carrying Guns dare enter for the Breaſt-work at the Point. The other ſide of the Peninſula is either a Precipice, or defended againſt Ships by Shoals and Breaches, ſo that there remains only the narrow Neck that is not naturally fortifyed; and if 30 Leagues of a Wilderneſs will not do that, it may be artificially fortified 20 ways. In ſhort, it may be made impregnable, and there are Bounds enough within it, if it were all cultivated, to afford 10000 Hogſheads of Sugar every

every Year. the Soil is rich, the Air good and temperate, the Water is ſweet, and every thing contributes to make it healthful and convenient. The Product of this Place, I mean in the Harbour and Creeks hereabouts, is Turtle, Manatee, and a vaſt variety of very good ſmall Fiſh, from the bigneſs of a Salmon to that of a Perch. The Land affords Monkeys of different Sorts, Wild-Deer, *Indian* Rabbet, wild Hog, Parrots of many kinds, Parakites, Macaws, Pelicans, and a hundred more Birds we have got no name to. There are moreover Land-Crabs, Souldiers, Land-Turtle, Lizards, Guanha's, Cock-Lizards, and Scorpions: I had almoſt forgot Partridges, Pheaſants, and a kind of Turkey. All the Birds in this Country are beautiful, but none of them that I could obſerve have any Notes. We have a Monkey aboard that chirms like a Lark, it will never be bigger than a Rat. This place affords Legions of monſtrous Plants, enough to confound all the Methods of Botany ever hitherto thought upon. However, I found a ſhift to make ſome Specimens, and that is all I can do. I ſay ſome Specimens, becauſe if I ſhould gather all, 'twould be enough to load the St. *Andrew*, for ſome of their Leaves exceed three Ells in length, and are very broad; beſides theſe Monſters, reducible to no Tribe, there are here a great many of the *European* kindred, (but ſtill ſomething odd about them) as *Lingua Cervina* of different kinds, *Filix* of different kinds, *Polypodium*, ſeveral of the *Plantæ Papilonaceæ*, *Muſci*, *Fungi*, *Convolvuli*, and a great many more I cannot now remember.

Now come we to their People. The Men are generally very civil and ſagacious, have all of them good Faces, are of low Stature, but very well built; they are of a Copper Colour, and have black Hair; they uſed to go naked, but are now as well cloathed as our ſelves; they wear a Plate of Gold in their Noſe, and a great many Rows of Beads about their Neck and Wriſts. They cover their Yard with a piece of Bark, or ſometimes Silver, of the very Shape and Bigneſs of that Paper-Caſe we uſe to put a Doſe of Pills in; they ſeem to be very ill furniſhed, for I never ſaw any of them have it half an Inch long, yet no doubt it's longer, but I fancy they ſheath it up as Dogs and Horſes do. The Women are generally the moſt pitiful like things that ever Man ſaw; their Habit differs from the Men, for they ordinarily wear a Ring in their Noſe; they have Petticoats and a Veil over their Face. They are under no formal Government, but every Captain commands his own River, Bay, or Iſland, where he lives; the greateſt of them all is one Captain *Ambroſio*, he commands particularly the Country about the *Samballoes* Point, but when he pleaſes he can levy all the Men betwixt that and the Gulf about 20 Leagues. There is another Captain *Pedro*, that lives in the Houſe with *Ambroſio*, and is his Nephew and Son in Law; there is a 3d Captain *Andreas*, that commands the River *Das Armas*; a 4th Captain *Brandy*, that commands about the *Golden Iſland*; a 5th Captain *Andreas*, that commands the Country adjoining to our Settlement; and a 6th Captain

Pedro his Conſort; a 7th Captain *Pacigo*, who commands at *Carret Bay*, and Captain *Diego* that commands the Gulph. *Ambroſio* ſeems to be the greateſt, and *Diego* next, both old Men; they are all very much our Friends, and fond of us. All have been frequently here except Captain *Diego* who is gouty. Some of theſe Captains wear the *Scots* Flag in their Canoe's. There is no ſuch thing as a King or Emperor of *Darien*, nor, ſo far as we can gather from all the chief Men hereabout, has been theſe 40 or 50 Years: The old Men remember ſuch a Man, they ſay he was a Tyrant, would take as many Wives as he pleaſed, and allow them but one, and therefore they cut him off. This derogates much from the Reputation of the *Hiſtory of the Buccaneers*. If there were ſuch a Man, he has been an *Indian* made Emperor by themſelves, I mean by the *Buccaneers*. This Country certainly affords Gold enough, for that beſides the Natives conſtantly aſſure us, that they know ſeveral gold Mines on this ſide; beſides that, I ſay, the Plates they wear in their Noſes, and the quantity of Gold that is among them, is enough to perſuade any Man of the Truth of it. There was one Night aboard here ſome *Indians* that had a hundred Ounces of Gold about them. We are certainly much bound to Providence in this Affair; for as we were ſearching for the place we were directed to, we found this, and though the Privateers had been ſo often at *Golden Iſland*, and though *Engliſh*, *Dutch* and *French* had been all over this Coaſt, from *Portobelo* to *Cartagena*, yet

never one of them made the Diſcovery; even the *Spaniards* themſelves never knew of this place. Beſides, for as great a Secret as we thought the Project, it was known all the *Weſt Indies* over, and yet it was not in their power to cruſh it. At *Madera* they ſeem'd to know it, at St. *Thomas* I'm ſure they knew it; at *Portobelo* their Intelligence was ſo good, that they knew the Names of all our Counſellors and Captains of Ships before we landed, and had that particular Obſervation, that there was four *Roberts* among them. Our Circumſtances are in ſome Reſpects very good, for we have Advice by the way of *Portobelo*, that there is a great Rebellion in *Mexico*, and Captain *Diego* and all the *Indians* about him are at preſent at War with the *Spaniards*. Captain *Ambroſio* is going to his Aſſiſtance, and that will divert them on that ſide; but which is better than all, that we are now in a Poſture of Defence againſt all the *Spaniſh* Force in *America*. I have ſeen already *Dutch*, *French*, and *Engliſh* all at the ſame time in our Harbour, and all of them wonder what the reſt of the World have been thinking on, when we came hither to the beſt Harbour of *America*, in the beſt place of it. Captain *Long* came in eight Days after, and I believe we were a great Eye-ſore to him, tho' he ſaid nothing. He commanded the *Rupert Prize*, a ſmall Engliſh Man of War fitted out by the King, upon what Deſign we know not, but he pretends it was to ſearch for a ſilver Wreck; he was on this Coaſt a Month before ſounding it; and converſing with the Natives, he put aſhore Men in ſome

places,

places, to take Poſſeſſion for the King of *Great Britain*, but none of them within 15 Leagues of us. Hearing by the Natives that we were here, he came in with his Long-Boat, as he ſaid, to ſee us, but I believe it was only to know the Certainty of what he feared was too true. He had told all the *Indian* Captains that he came only to try their Inclinations, and that there was a great Fleet coming with a great many People to ſettle among them and defend them againſt their Enemies, he meant *Engliſh* that were to come by his Direction; but our Fleet coming within a Month after, they all lookt upon us to be the People he ſpoke of; ſo that whatever Preſents he made them before that time, was as much for our Advantage as if our ſelves had given them. He pretends to be a Conjurer, and to foretel things; but that was the trueſt Prophecy ever he ſpoke, though he knew not whom he ſpoke of.

A DISCOURSE tending to prove at what Time *and* Place Julius Cæſar *made his firſt Deſcent upon* Britain: *Read before the* Royal Society *by* E. Halley.

THough *Chronological* and *Hiſtorical* Matters may not ſeem ſo properly the Subject of theſe Tracts, yet there having, in one of the late Meetings of the *Royal Society*, been ſome Diſcourſe about the Place where *Julius Cæſar* landed in *Britain*, and it having been required of me to ſhew the Reaſon why I concluded it to have been in the *Downs*; in doing thereof, I have had the good Fortune ſo far to pleaſe thoſe worthy Patrons of Learning I have the Honour to ſerve, that they thought fit to command it to be inſerted in the *Philoſophical Tranſactions*, as an Inſtance of the great uſe of *Aſtronomical Computation* for fixing and aſcertaining the Times of memorable Actions, when omitted or not duly delivered by the Hiſtorian.

1. The Authors that mention this Expedition with any Circumſtances, are *Cæſar* in his *Commentaries lib.* 4. and *Dion Caſſius* in *lib.* 39. *Livy*'s Account being loſt, in whoſe 105th Book might poſſibly have been found the Story

Story more at large. It is certain that this Expedition of *Cæſar*'s, was in the Year of the *Conſulate* of *Pompey* and *Craſſus*, which was in the Year of *Rome* 699. or the 25th before the uſual Æra of Chriſt: And as to the time of the Year, *Cæſar* ſays that *exiguâ parte æſtatis reliquâ*, he came over only with two Legions, *viz.* the 7th and 10th, and all Foot, in about 80 Sail of Merchant Ships, 18 Sail that were ordered to carry the Horſe not being able to get out at the ſame time from another Port, where they lay Wind-bound. He ſays that he arrived about the 4th hour of the Day, *viz.* between nine and ten in the Morning on the Coaſt of *Britain*, where he found the Enemy drawn up on the *Cliffs* ready to repel him, which place he thus deſcribes, *Loci hæc erat natura, adeo montibus auguſtis mare continebatur ut ex locis ſuperioribus in littus telum adjici poſſit*, by which the *Cliffs* of *Dover* and the *South Foreland* are juſtly deſcribed, and could be no other Land, being he ſays in the 5th Book of his Commentaries, *in Britanniam trajectum eſſe cognoverit circiter millium paſſuum triginta à continenti*, the *Cliffs* of the *North-Foreland* being at a much greater Diſtance. Here he ſays he came to an Anchor, and ſtaid till the *9th* hour, or till about between three and four in the Afternoon, expecting till his whole Fleet was come up; and in the mean time called a Council of War, and advertiſed his Officers, after what manner they were to make their Deſcent, particularly in relation to the Suff of the Sea, whoſe motion he calls *celerem atq; inſtabilem*, quick and uneven. Then, *viz.* about

three in the Afternoon he weighed Anchor, and having gotten the *Wind* and *Tide* with him, he ſailed about eight Miles from the firſt place, and anchored againſt an open and plain Shore.

2. Here he made his Deſcent, and having told us the Oppoſition that was made, and the Means he uſed to get on ſhore, he comes to ſay, that after he had been *four Days* in *Britain*, the 18 Ships with his Horſe put to Sea, and were come in ſight of his Camp, when a ſuddain Tempeſt aroſe, with contrary Wind, ſo that ſome of the Ships put back again, others were driven to the Weſtward, not without great Danger, and coming to Anchor, they found they could not ride it out: when Night came on, they put off to Sea and returned from whence they came. *That ſame Night* it was *Full-Moon*, which makes the greateſt Tides in the Ocean, and they being ignorant thereof, their Gallies, which were drawn on Shore, were filled by the Tide, *&c.*

3. Then he ſays that the Day of the autumnal Equinox being at hand, after ſome Days ſtay, wherein there paſſed no Action becauſe he kept cloſe in his Camp by the Shore; and not thinking it proper to ſtay till the Winter came on, he returned into *Gallia:* The next Year he made a further Expedition with 5 Legions and a good Body of Horſe, but there is but little in the Hiſtory thereof ſerving to our Purpoſe, excepting that he ſays that he ſet Sail from *Portus Icius* about Sun Set, with a gentle S. W. Wind, *leni Africo profectus*; that about Midnight it fell Calm, and

and being carried away with the Tide, by the time it was Day, he found he had left *Britain* on the left Hand; but then the Tide turning they fell to their Oars, and by Noon reached that part of the Iſland where he landed before, and came on Shore without Oppoſition. And then marched up into the Country, leaving his Ships at Anchor *in littora molli & aperto.*

4. This is all in *Cæſar* that is any thing pertinent, and I find no where elſe any thing to guide us farther, except one Paſſage in *Dion Caſſius*, who ſpeaking of the firſt Landing of *Cæſar*, ſays ἐμμύτοι γὰρ ἔσχε, προσέσχεν, that is, as I tranſlate it, *but he landed not where he intended* for that the *Britains* hearing of his coming, had poſſeſt all uſual Places of Landing, Ἄκραν δέ τινα προέχουσαν περιπλεύσας ἑτέρωσε παρεκομίσθη. Κἀνταῦθα τοὺς προσμίξαντας τῷ εἰς τὰ τενάγη ἀποβαίνοντι νικήσας, ἔφθη τὴν γῆς κρατήσας, in my Engliſh. Wherefore doubling a certain Head-Land, he made to the Shore on the other ſide, where he overcame thoſe that ſkirmiſhed with him at the Waters Edge, and ſo got well on Land. Here I make bold to tranſlate the Words εἰς τὰ τενάγη, *at the Water Edge*, which in *H. Stephens* Edition is interpreted *in paludibus*; but I have the Authority of *Suidas*, who ſays, τέναγος, παλαία ἰλύς, or the Sea Mud, and is therefore properly the Ouſe on the Sea Shore, and by an eaſie Figure may be put for the Shore it ſelf, where ſuch Ouſe commonly is found.

5. From theſe *data*, that it was in the Year of the *Conſulate* of *Pompey*, and *Craſſus*: that it was *exiguâ parte ætatis reliquâ*, and four

four Days before a Full-Moon, which fell out in the Night time. The time of this Invaſion will be determined to a Day: For by the Eclipſe of the Moon, whereof *Druſus* made ſo good uſe to quiet a Mutiny in the *Pannonian* Army, upon the News of the Death of *Auguſtus*, it follows that *Auguſtus* died *Anno Chriſti* 14. which was reckoned *Anno Urbis conditæ* 767. and that this Action was 68 Years before, *viz.* in the 55th Year before Chriſt Current. In which Year the full Moon fell out *Auguſt* 30. after Midnight, or 31 in the Morning before Day; and the preceding Full-Moon was *Auguſt* 1. ſoon after Noon; ſo that this could not be the Full-Moon mentioned, as falling in the Day time: nor that in the beginning of *July*, it being not 10 Days after the Summer Solſtice, when it would not have been ſaid *exiguâ parte æſtatis reliquâ*. It follows therefore that the Full-Moon ſpoken of, was on *Auguſt* 30. at Night, and that the Landing on *Britain* was *Auguſt* 26. in the Afternoon, about the Month before the Autumnal Equinox; which agrees to all the Circumſtances of the Story in point of Time.

6. As to the Place, the high Land and Cliffs deſcribed, could be no other than thoſe of *Dover*, and are allowed to have been ſo by all, it remains only to examine whether the Deſcent was made to the Northward or Southward of the place where he firſt anchored. The *data* to determine this are firſt that it was four Days before the Full-Moon. Second that that Day by three of the Clock in the Afternoon the Tide ran the ſame way he ſailed.

ſailed. Thirdly that a S. by E. Moon makes High-Water on all that Coaſt, the Flood coming from the Southward: Hence it will follow, that that Day it was High-Water there about eight in the Morning, and conſequently Low-Water about two, wherefore by three the Tide of Flood was well made up, and it is plain that *Cæſar* went with it and the Flood ſettling to the Northward ſhews that the open plain Shore where he landed was to the Northward of the Cliffs, and muſt be in the *Downs*; and this I take to be little leſs than Demonſtration. A ſecond Argument is drawn from the Wind wherewith he ſet out on his ſecond Expedition, *viz.* S. W. as appears by the Words *leni Africo profectus*, with which the Navigation of thoſe times would hardly permit a Ship to ſail nearer the Wind than eight Points, or a N. W. Courſe; which would ſerve indeed to go into the *Downs*, but would by no means fetch the Low-Land towards *Dengyneſs*, which is much about Weſt from *Calais*, and not more than W. N. W. from *Boulogne*, if it ſhall be ſaid that that was the *Pontus Icius* from which *Cæſar* ſet out. Whence I take it to be evident that if *Cæſar* was not bound more Northerly than the *South-Foreland*, he could not have thought the *Africus* or S. W. Wind proper for his Paſſage, which was then intended for the place where he firſt landed the Year before.

7. Juſtly to determine which the *Portus Icius* was I find no where ſufficient grounds; only *Ptolemy* calls the Promontory of *Calais-Cliffs* by the name of Ἰκιον ἄκρον, whence there is reaſon to conjecture, that the *Portus Icius* was very

very near thereto, and that it was either *Ambletuſe* on one ſide, or *Calais* on the other. The ſame *Ptolemy* places Γισοῤῥίαχον ὄπιναον in the ſame Latitude with the Ἰκιονᾶ ἄκρον, but ſomething more to the Eaſt, which ſeems to refute thoſe that have ſuppoſed the ancient Port of *Geſſoriacum* to have been *Boulogne*, whereas by *Ptolemy*'s Poſition, it muſt be either *Dunkirk* or *Gravelling*, but the former moſt likely, both by the Diſtance from the Ἴκιον ἄκρον, being about 20 Miles or half a Degree of Longitude to the Eaſt, or $\frac{1}{7}$ of the whole Coaſt of *Flanders*, which he makes but a Degree and Quarter from the *Acron Icion* to the Mouth of the *Scheld* which he calls *Oſtia Tabudæ:* As alſo for that *Pliny* l. 4. c. 16. ſpeaking of *Geſſoriacum*, ſays the *proximis Trajectus* into *Britain* from thence is 50 Miles, which is too much unleſs *Geſſoriacum* were ſomething more Eaſterly than *Calais*. *Dion Caſſius* makes the Diſtance between *France* and *Britain* 450 *Stadia* or 56 Miles, and ſays likewiſe 'tis the neareſt, τὸ ζωλομώτατον. But this is in part amended by the Explication given in the *Itinerary* of *Antoninus*, where the ſpace between *Geſſoriacum* and *Rutupium* is ſaid to be 450 *Stadia* (for this was the ordinary Paſſage of the *Romans* into *Britain*,) *Rutupium* being more Northerly and *Geſſoriacum* more Eaſterly than the *termini* of *Cæſar*'s Voyage, and conſequently the diſtance greater than 30 Miles which *Cæſar* had obſerv'd; and now lately an accurate Survey has proved the diſtance between Land and Land to be 26 *Engliſh Miles* or $28\frac{1}{2}$ *Roman Miles*, which ſhews how near *Cæſar*'s eſtimate was to the Truth.

A farther Argument (but not of equal Force with the former becauſe of the Modernneſs of the Author, who writ above 250 Years after) may be drawn from the Words of *Dion Caſſius*, where he ſays, ἄκραν τινὰ περίχυσιν περιπλέυσας ἔτρωσε παρεκομίδη, that after his firſt anchoring he ſailed about a Promontory to the place where he landed: Now there are no other Promontories on all that Coaſt but the *South-Foreland* and *Dengyneſs*; the latter of which it could not be, becauſe *Cæſar* ſays he ſailed but 8 Miles, and the *Neſs* it ſelf is above 10 Miles from the South and neareſt End of the *Chalk-Cliffs* by the Town of *Hith*; and to have gone round that Point to the other ſide the Diſtance muſt have been much greater. So that the Promontory ſpoken of by *Dion*, muſt needs be the *South-Foreland*, and *Cæſar* muſt anchor near over againſt *Dover*, from whence ſailing 8 Miles, he would double a Head-Land and come to the *Downs*; which is ſuch a Coaſt as he deſcribes in one place by *apertum ac planum littus*, and in his 5th Book by *molle ac apertum littus*. As to *Dion*'s word εἰς τὰ τενάγη, what I have already ſaid about it ſeems ſufficient to prove that he means no more than the Waters Edge; and the *Etymologiſts* derive it from τήγω *madefacio*, becauſe the Waſh and Breach of the Sea does always keep it wet. And this Word τὰ τενάγη is uſed by *Polybius* for the Sea Ouſe; and in another place he ſpeaks of the Difficulty of landing at the Mouth of a River, Διὰ τὸ τεναγώδη πάροδον, *ob limoſum acceſſum*, that it is not to be doubted that it ought to be rendred in this place, *ad vadum maris*

rather than *in paludibus*. And ſo this Objection againſt the Aſſertion that *Cæſar* landed in the *Downs*, which is known to be a firm champain Country without Fenns and Moraſſes, will be removed; and the whole Argument will 'tis hoped be admitted by the Curious.

F I N I S.

BOOKS printed for JAMES and JOHN KNAPTON, at the *Crown* in St. *Paul's* Church-yard *London*.

I. AN Inſtitution of Fluxions, containing the firſt Principles, the Operations, with ſome of the Uſes and Applications of that admirable Method; according to the Scheme prefixed to his Tract of Quadratures, (by its firſt Inventor) the incomparable Sir ISAAC NEWTON, by HUMPHRY DITTON, late Maſter of the new Mathematical School in *Chriſt's Hoſpital*. The Second Edition reviſed, corrected, and improved by JOHN CLARKE, D.D. Prebendary of *Canterbury* and Chaplain in Ordinary to his Majeſty.

II. ROHAULT's Syſtem of Natural Philoſophy; illuſtrated with Dr. SAMUEL CLARKE's Notes. Taken moſtly out of Sir ISAAC NEWTON's Philoſophy. Done into *Engliſh* by JOHN CLARKE, D. D. In Two Vols. 8vo. *price* 10*s*.

III. Mr. WINGATE's Arithmetick: Containing a plain and familiar Method for attaining the Knowledge and Practice of common Arithmetick. The Fifteenth Edition.

IV. HUYGENS's Celeſtial Worlds diſcovered, or Conjectures concerning the Inhabitants, Plants, and Productions of the Worlds in the Planets. The Second Edition, *price* 3*s*.

VI. Artificial Clock-maker. A Treatiſe of watch and Clock Work. By W. DERHAM, M.A. *F.R.S.* The Third Edition, *price* 1 3*s*. 6*d*.

BOOKS printed for JOHN CLARKE at the *Bible* under the *Royal-Exchange*.

I. THE Art of Surgery: In which is laid down ſuch a general Idea of the ſame, as is founded upon Reaſon, confirm'd by Practice, and farther illuſtrated with many ſingular and rare Caſes Medico Chirurgical. In Two Vols. The Second Edition with large Additions. By DANIEL TURNER, M. D. of the College of Phyſicians in *London*.

II. The Nature, Cauſes and Cures of Fluxes: To which is added, the Method of finding the Doſes of purging and vomiting Medicines for every Age and Conſtitution of Men; together with the Doſes of theſe Medicines in common Uſe. The Third Edition. By W. COCKBURN, M. D. F. R. S. and of the College of Phyſicians in *London*.

III. A new Theory of Phyſick and Diſeaſes, dedicated to Dr. MEAD. By NICHOLAS ROBINSON, M. D.

IV. KEILL's Anatomy of human Bodies.

V. Geography anatomiz'd; or the Geographical Grammar, being a ſhort and exact Analyſis of the whole Body of modern Geography, after a new and curious Method. By PAT. GORDON, M. A. F. R. S.

VI. Dr. TOWN's Diſeaſes of the *Weſt-Indies*.

VII. Compleat Treatiſe of the Liver with its Uſes.

AC
7
.H18
1727
v.3

Halley
Miscellanea curiosa
...

045708